10/687,153R>

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:ssspta1201txs

PASSWORD:
TERMINAL (ENTER 1, 2, 3, OR ?):2

* * * * * * * * * * Welcome to STN International * * * * * * * * * *

NEWS	1		Web Page URLs for STN Seminar Schedule - N. America
NEWS	2		"Ask CAS" for self-help around the clock
NEWS	3	SEP 01	New pricing for the Save Answers for SciFinder Wizard within STN Express with Discover!
NEWS	4	OCT 28	KOREAPAT now available on STN
NEWS	5	NOV 30	PHAR reloaded with additional data
NEWS	6	DEC 01	LISA now available on STN
NEWS	7	DEC 09	12 databases to be removed from STN on December 31, 2004
NEWS	8	DEC 15	MEDLINE update schedule for December 2004
NEWS	9	DEC 17	ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	10	DEC 17	COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	11	DEC 17	SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	12	DEC 17	CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected
NEWS	13	DEC 17	THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
NEWS	14	DEC 30	EPFULL: New patent full text database to be available on STN
NEWS	15	DEC 30	CAPLUS - PATENT COVERAGE EXPANDED
NEWS	16	JAN 03	No connect-hour charges in EPFULL during January and February 2005
NEWS	17	FEB 25	CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered
NEWS	18	FEB 10	STN Patent Forums to be held in March 2005
NEWS	19	FEB 16	STN User Update to be held in conjunction with the 229th ACS National Meeting on March 13, 2005
NEWS	20	FEB 28	PATDPAFULL - New display fields provide for legal status data from INPADOC
NEWS	21	FEB 28	BABS - Current-awareness alerts (SDIs) available
NEWS	22	FEB 28	MEDLINE/LMEDLINE reloaded

NEWS EXPRESS	JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
NEWS HOURS	STN Operating Hours Plus Help Desk Availability
NEWS INTER	General Internet Information
NEWS LOGIN	Welcome Banner and News Items
NEWS PHONE	Direct Dial and Telecommunication Network Access to STN
NEWS WWW	CAS World Wide Web Site (general information)

Enter NEWS followed by the item number or name to see news on that specific topic.

All use of STN is subject to the provisions of the STN Customer

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agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * * * * * * * * * * STN Columbus * * * * * * * * * * * * * * * *

FILE 'HOME' ENTERED AT 18:50:50 ON 01 MAR 2005

=> file reg

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.42	0.42

FILE 'REGISTRY' ENTERED AT 18:51:53 ON 01 MAR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 28 FEB 2005 HIGHEST RN 839671-97-5
DICTIONARY FILE UPDATES: 28 FEB 2005 HIGHEST RN 839671-97-5

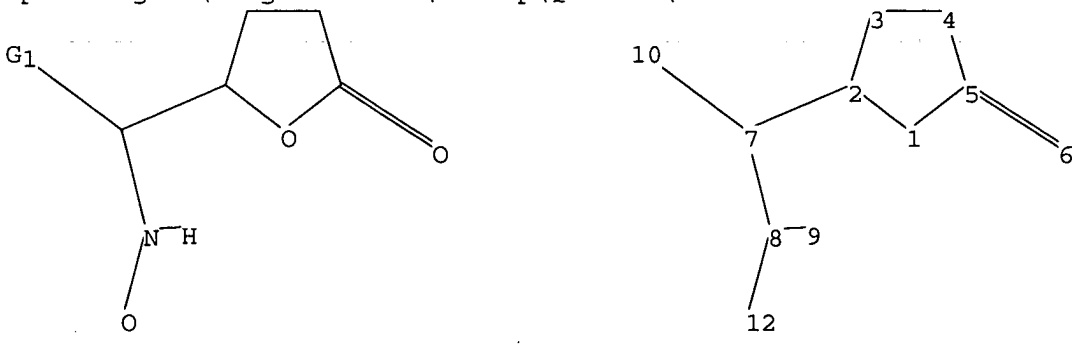
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Program Files\Stnexp\Queries\10687153.str



chain nodes :
6 7 8 9 10 12
ring nodes :
1 2 3 4 5
chain bonds :
2-7 5-6 7-8 7-10 8-9 8-12
ring bonds :
1-2 1-5 2-3 3-4 4-5
exact/norm bonds :
5-6 7-8 7-10 8-12

10/687,153R>

exact bonds :
1-2 1-5 2-3 2-7 3-4 4-5 8-9
isolated ring systems :
containing 1 :

G1:Ak,Cy,C

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 12:CLASS

L1 STRUCTURE UPLOADED

=> SET GRAPHICS TEXT

SET COMMAND COMPLETED

=>
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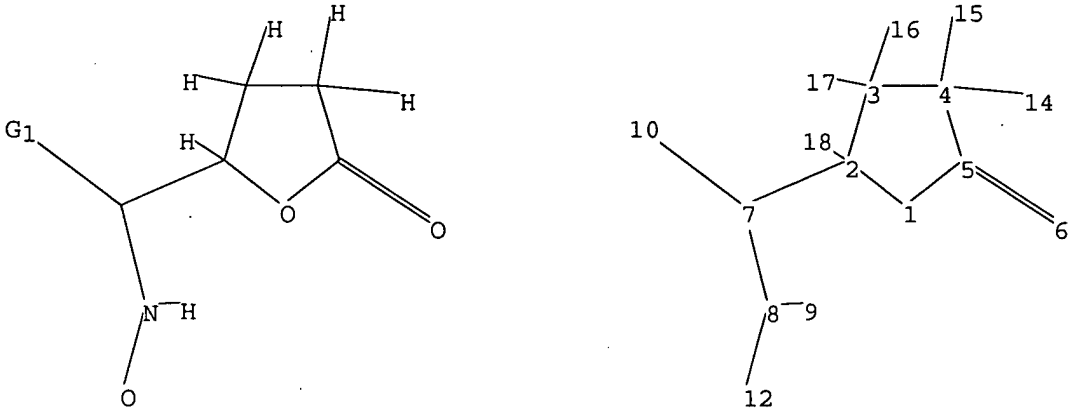


chain nodes :
6 7 8 9 10 12 14 15 16 17 18
ring nodes :
1 2 3 4 5
chain bonds :
2-7 2-18 3-16 3-17 4-14 4-15 5-6 7-8 7-10 8-9 8-12
ring bonds :
1-2 1-5 2-3 3-4 4-5
exact/norm bonds :
5-6 7-8 7-10 8-12
exact bonds :
1-2 1-5 2-3 2-7 2-18 3-4 3-16 3-17 4-5 4-14 4-15 8-9
isolated ring systems :
containing 1 :

G1:Ak,Cy,C

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 12:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS 18:CLASS

10/687,153R>

L2 STRUCTURE UPLOADED

=> s l2
SAMPLE SEARCH INITIATED 18:54:16 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 66 TO ITERATE

100.0% PROCESSED 66 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 833 TO 1807
PROJECTED ANSWERS: 0 TO 0

L3 0 SEA SSS SAM L2

=> s l2 ful
FULL SEARCH INITIATED 18:54:22 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1187 TO ITERATE

100.0% PROCESSED 1187 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.02

L4 0 SEA SSS FUL L2

=> file reg
COST IN U.S. DOLLARS SINCE FILE ENTRY TOTAL SESSION
FULL ESTIMATED COST 163.91 164.33

FILE 'REGISTRY' ENTERED AT 18:55:48 ON 01 MAR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES: 28 FEB 2005 HIGHEST RN 839671-97-5
DICTIONARY FILE UPDATES: 28 FEB 2005 HIGHEST RN 839671-97-5

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

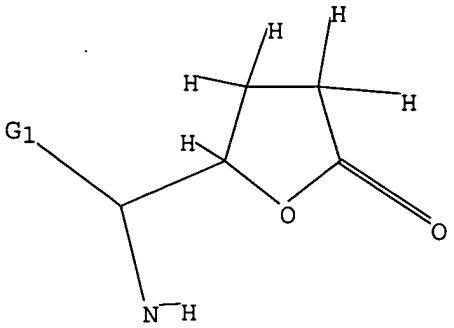
Please note that search-term pricing does apply when
conducting SmartSELECT searches.

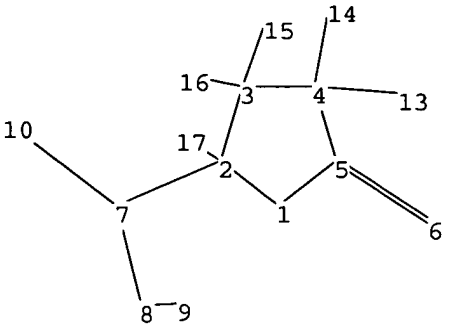
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=>
Uploading C:\Program Files\Stnexp\Queries\106871532.str

10/687,153R>





chain nodes :
6 7 8 9 10 13 14 15 16 17
ring nodes :
1 2 3 4 5
chain bonds :
2-7 2-17 3-15 3-16 4-13 4-14 5-6 7-8 7-10 8-9
ring bonds :
1-2 1-5 2-3 3-4 4-5
exact/norm bonds :
5-6 7-8 7-10
exact bonds :
1-2 1-5 2-3 2-7 2-17 3-4 3-15 3-16 4-5 4-13 4-14 8-9
isolated ring systems :
containing 1 :

G1:Ak,Cy,C

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS 17:CLASS

L5 STRUCTURE UPLOADED

=> s l5
SAMPLE SEARCH INITIATED 18:56:04 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 632 TO ITERATE

100.0% PROCESSED 632 ITERATIONS 4 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 11132 TO 14148
PROJECTED ANSWERS: 4 TO 200

L6 4 SEA SSS SAM L5

=

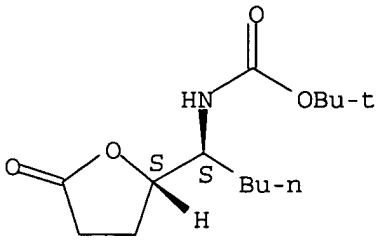
=> d scan

L6 4 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Carbamic acid, [1-(tetrahydro-5-oxo-2-furanyl)pentyl]-, 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI)

10/687,153R>

MF C14 H25 N O4

Absolute stereochemistry.

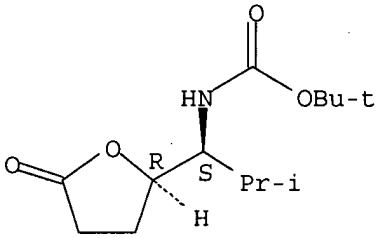


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):3

L6 4 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Carbamic acid, [(1S)-2-methyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]propyl]-, 1,1-dimethylethyl ester (9CI)
MF C13 H23 N O4

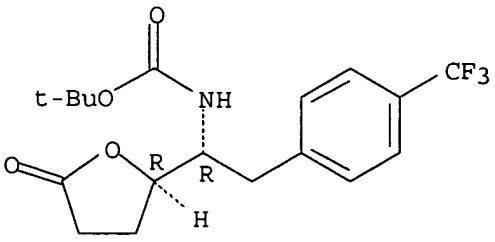
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L6 4 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN Carbamic acid, [1-(tetrahydro-5-oxo-2-furanyl)-2-[4-(trifluoromethyl)phenyl]ethyl]-, 1,1-dimethylethyl ester, [R-(R*,R*)]- (9CI)
MF C18 H22 F3 N O4

Absolute stereochemistry.

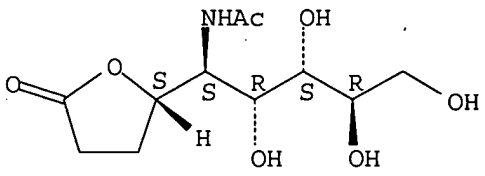


10/687,153R>

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L6 4 ANSWERS REGISTRY COPYRIGHT 2005 ACS on STN
IN D-glycero-D-galacto-Nononic acid, 5-acetamido-2,3,5-trideoxy-, γ-lactone (7CI)
MF C11 H19 N O7

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

=> d his

(FILE 'HOME' ENTERED AT 18:50:50 ON 01 MAR 2005)

FILE 'REGISTRY' ENTERED AT 18:51:53 ON 01 MAR 2005
L1 STRUCTURE UPLOADED
SET GRAPHICS TEXT
L2 STRUCTURE UPLOADED
L3 0 S L2
L4 0 S L2 FUL

FILE 'REGISTRY' ENTERED AT 18:55:48 ON 01 MAR 2005
L5 STRUCTURE UPLOADED
L6 4 S L5
SET GRAPHICS PLOT10

=> s l5 ful
FULL SEARCH INITIATED 18:59:46 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 12705 TO ITERATE

100.0% PROCESSED 12705 ITERATIONS 62 ANSWERS
SEARCH TIME: 00.00.01

L7 62 SEA SSS FUL L5

=> file caplus

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	163.91	328.24

FILE 'CAPLUS' ENTERED AT 18:59:55 ON 01 MAR 2005

FILE COVERS 1907 - 1 Mar 2005 VOL 142 ISS 10
FILE LAST UPDATED: 28 Feb 2005 (20050228/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s l7
L8 111 L7

=> d l8 ibib hitstr abs 1-111

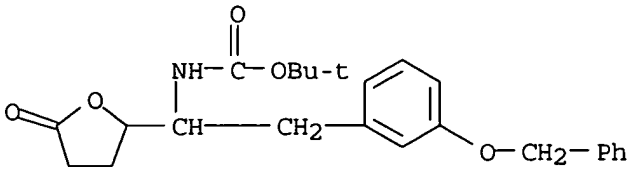
L8 ANSWER 1 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:29320 CAPLUS
DOCUMENT NUMBER: 142:134632
TITLE: Macrocyclic compounds having aspartic protease inhibiting activity and pharmaceutical uses thereof
INVENTOR(S): Betschart, Claudia; Tintelnot-Blomley, Marina
PATENT ASSIGNEE(S): Novartis A.-G., Switz.; Novartis Pharma G.m.b.H.
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005003106	A1	20050113	WO 2004-EP7247	20040702

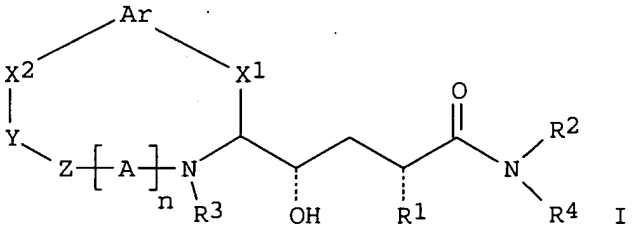
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2003-15654 A 20030703
IT **824429-05-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(macrocyclic compds. having aspartic protease inhibiting activity and pharmaceutical uses thereof)
RN 824429-05-2 CAPLUS
CN Carbamic acid, [2-[3-(phenylmethoxy)phenyl]-1-(tetrahydro-5-oxo-2-furanyl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

10/687,153R>



GI



AB The preparation of macrocyclic compds., I, (R1 = alkyl, alkoxy, piperidinyl, or pyrrolidinyl; R2, R4 = H, alkyl,cycloalkyl, aryl, heteroaryl etc or R2 and R4, together with the nitrogen to which they are attached, form an optionally substituted piperidino, pyrrolidinyl, morpholino or piperazinyl group; R3 = H, alkyl; X1 = CH2; X2 = CH2, O, S, CO, COO, OCO, NHCO, CONH, or NR, R being hydrogen or (C1-4)alkyl; Y = (C1-8)alkylen or (C1-8)alkylenoxy(C1-6)alkylen, (C1-8)alkenylen or (C1-8)alkenylenoxy(C1-6)alkylen; Ar = a Ph ring optionally mono- di- or trisubstituted; Z = CO, A = a natural or unnatural alpha-amino-acid; and n is 0 or 1, or Z = S02 and AA = an optionally substituted ethylencarbonyl group (derived from a natural or unnatural alpha-amino acid by replacement of the nitrogen by a methylene group), and n is 1) are prepared as aspartic protease inhibitors for the treatment of neurol. and vascular disorders related to beta-amyloid generation and/or aggregation.

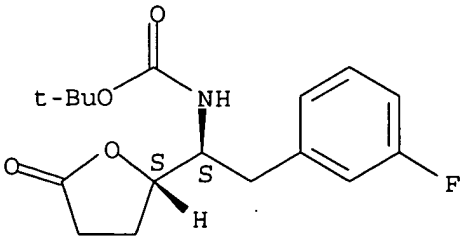
REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 5 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:689182 CAPLUS
DOCUMENT NUMBER: 141:349978
TITLE: Stereoselective synthesis of 5-[(1S)-N-Boc-amino-(2S)-(3-fluorophenyl)ethyl]-dihydrofuran-2-one
AUTHOR(S): Li, Bryan; Buzon, Richard A.; Chiu, Charles K.-F.; Colgan, Stephen T.; Jorgensen, Matthew L.; Kasthurikrishnan, Narasim
CORPORATE SOURCE: Chemical Research and Development, Pfizer Global Research and Development, Groton Laboratories, Groton, CT, 06340, USA
SOURCE: Tetrahedron Letters (2004), 45(37), 6887-6890
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **344620-59-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(stereoselective synthesis of 5-[(1S)-N-Boc-amino-(2S)-(3-fluorophenyl)ethyl]-dihydrofuran-2-one in presence of phthalic anhydride as thiolate scavenger)

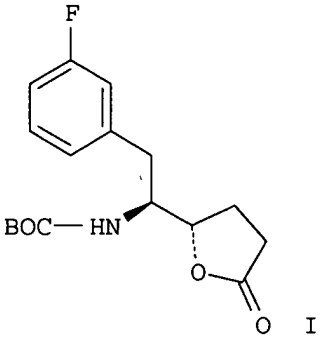
10/687,153R>

RN 344620-59-3 CAPLUS
CN Carbamic acid, [(1S)-2-(3-fluorophenyl)-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

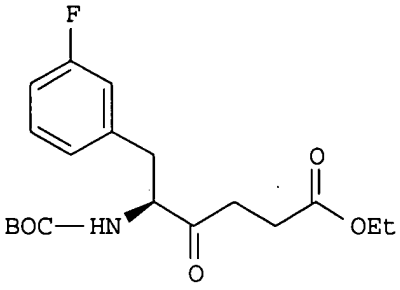
Absolute stereochemistry. Rotation (-).



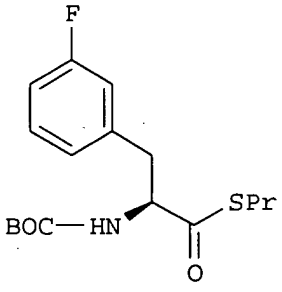
GI



I



II



III

AB A short, efficient, and highly diastereoselective synthesis of 5-[(1S)-N-Boc-amino-(2S)-(3-fluorophenyl)ethyl]dihydrofuran-2-one (I) is described. Use of phthalic anhydride as thiolate scavenger effectively preserves the chiral integrity of the α-amino ketone product II obtained from the reaction of organozincate BrZnCH2CH2CO2Et with thioester III.

REFERENCE COUNT: 36 THERE ARE 36 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:372867 CAPLUS
DOCUMENT NUMBER: 140:375191
TITLE: Preparation of heteroaryl-hexanoic acid amides which

are CCR1 antagonists useful as immunomodulatory agents

INVENTOR(S): Brown, Matthew F.; Gaweco, Anderson S.; Gladue, Ronald P.; Kath, John C.; Poss, Christopher S.

PATENT ASSIGNEE(S): Pfizer Inc, USA

SOURCE: U.S. Pat. Appl. Publ., 63 pp.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2004087571	A1	20040506	US 2003-687015	20031016
WO 2004039375	A1	20040513	WO 2003-IB4614	20031020

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW

RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-422579P P 20021030

OTHER SOURCE(S): MARPAT 140:375191

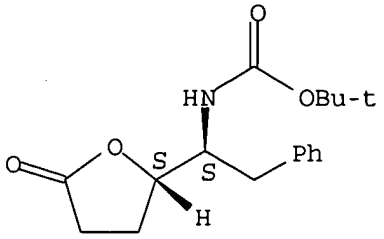
IT **133333-27-4 236733-86-1**

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of heteroaryl-substituted hexanamides as CCR1 antagonists useful as immunomodulatory agents)

RN 133333-27-4 CAPLUS

CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

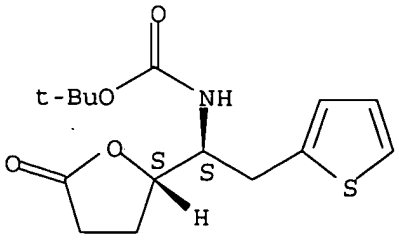
Absolute stereochemistry. Rotation (-).



RN 236733-86-1 CAPLUS

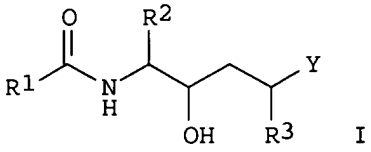
CN Carbamic acid, [(1S)-1-[(2S)-tetrahydro-5-oxo-2-furanyl]-2-(2-thienyl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



10/687,153R>

GI

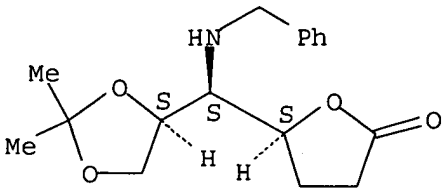


I

AB The title compds. [I; R1 = (un)substituted heteroaryl; R2 = (un)substituted phenyl-(CH2)m-, naphthyl-(CH2)m-, cycloalkyl-(CH2)m-, alkyl or heteroaryl-(CH2)m-; m = 0-4; R3 = H, (un)substituted alkyl, cycloalkyl-(CH2)n-, heterocycloalkyl-(CH2)n-, heteroaryl-(CH2)n-, aryl-(CH2)n-; n = 0-6; R3 and the carbon to which it is attached form (un)substituted and/or fused 5-7 membered carbocyclic ring; Y = heteroaryl, heterocycloalkyl, (un)substituted H2N-sulfonyl, C(:X)NH2; X = O, S, (un)substituted NH; R4 = H, alkyl, OH, alkoxy, hydroxyalkyl, alkoxyCO, cycloalkyl-(CH2)p-, (un)substituted heterocycloalkyl-(CH2)p-, heteroaryl-(CH2)p-, phenyl-(CH2)p- or naphthyl-(CH2)p-; p = 0-4] which are CCR1 antagonists useful as immunomodulatory agents, were prepared E.g., a multi-step synthesis of quinoxaline-2-carboxylic acid [1(S)-benzyl-4(R)-benzylcarbamoyl-7-fluoro-2(S)-hydroxy-7-methyloctyl]amide, was given. All of the compds. I that were tested showed IC50 of <25 μM in the chemotaxis assay.

L8 ANSWER 13 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:108648 CAPLUS
DOCUMENT NUMBER: 140:303973
TITLE: Variable Strategy toward Carba Sugars and Relatives. 6.Diastereoselective Synthesis of 2-Deoxy-2-amino-5a-carba-β-L-mannopyranuronic Acid and 2-Deoxy-2-amino-5a-carba-β-L-mannopyranose
AUTHOR(S): Rassu, Gloria; Auzzas, Luciana; Zambrano, Vincenzo; Burreddu, Paola; Pinna, Luigi; Battistini, Lucia; Zanardi, Franca; Casiraghi, Giovanni
CORPORATE SOURCE: Sezione di Sassari, Istituto di Chimica Biomolecolare del CNR, Sassari, I-07040, Italy
SOURCE: Journal of Organic Chemistry (2004), 69(5), 1625-1628 CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **227780-31-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(diastereoselective Mukaiyama Aldol condensation of butyldimethylsilyloxyfuran with glyceraldehyde in synthesis deoxyaminocarbablmannopyranuronic acid and deoxyaminocarbablmannopyranose)
RN 227780-31-6 CAPLUS
CN D-ribo-Heptonic acid, 2,3,5-trideoxy-6,7-O-(1-methylethylidene)-5-[(phenylmethyl)amino]-, γ-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (+).

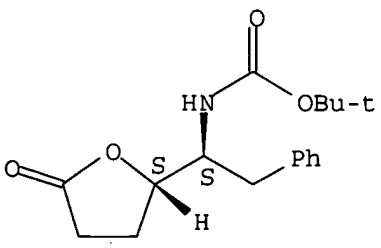


AB Efficient, total syntheses of novel 2-deoxy-2-amino-5a-carba-β-L-mannopyranuronic acid and 2-deoxy-2-amino-5a-carba-β-L-mannopyranose, a positional stereoisomer of validamine, have been achieved in 28% and 24% overall yields and in 12 steps and 13 steps, resp., from 2-[(tert-butyldimethylsilyl)oxy]furan and (2S)-2,3-O-isopropylideneglyceraldehyde N-benzylimine (I) via two highly diastereoselective Mukaiyama aldol-related chemical maneuvers. The strategy, which furnishes the targeted carba-sugars in enantiopure forms, allows for complete control of the configuration at all five contiguous stereo-centers of the targets by utilizing the sole element of chirality present in the aldimine progenitor I.

REFERENCE COUNT: 33 THERE ARE 33 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 14 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:51783 CAPLUS
DOCUMENT NUMBER: 140:263759
TITLE: Rational design and synthesis of selective BACE-1 inhibitors
AUTHOR(S): Brady, Stephen F.; Singh, Satendra; Crouthamel, Ming-Chih; Holloway, M. Katharine; Coburn, Craig A.; Garsky, Victor M.; Bogusky, Michael; Pennington, Michael W.; Vacca, Joseph P.; Hazuda, Daria; Lai, Ming-Tain
CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Research Laboratories, West Point, PA, 19486, USA
SOURCE: Bioorganic & Medicinal Chemistry Letters (2004), 14(3), 601-604
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **133333-27-4 143601-50-7**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation and structure-activity relationship studies of selective BACE-1 inhibitors)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

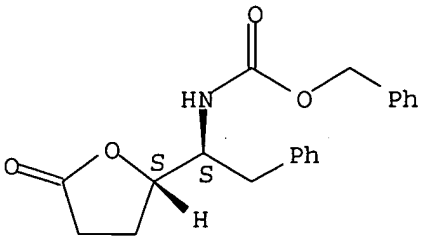
Absolute stereochemistry. Rotation (-).



10/687,153R>

RN 143601-50-7 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, phenylmethyl ester (9CI) (CA INDEX NAME)

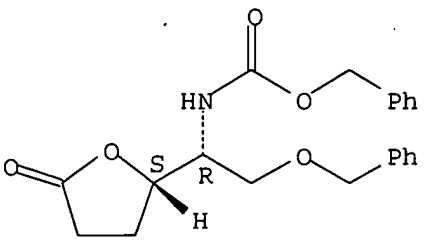
Absolute stereochemistry.



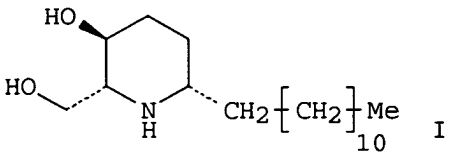
AB An effective approach for enhancing the selectivity of β-site amyloid precursor protein cleaving enzyme (BACE 1) inhibitors is developed based on the unique features of the S1' pocket of the enzyme. A series of low mol. weight (<600) compds. were synthesized with different moieties at the P1' position. The selectivity of BACE 1 inhibitors vs. cathepsin D and renin was enhanced 120-fold by replacing the hydrophobic Pr group with a hydrophilic propionic acid group.
REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 15 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:977047 CAPLUS
DOCUMENT NUMBER: 140:235917
TITLE: A concise and stereoselective synthesis of (+)- and (-)-deoxoprosophylline
AUTHOR(S): Chavan, Subhash P.; Praveen, Cherukupally
CORPORATE SOURCE: Division of Organic Chemistry: Technology, National Chemical Laboratory, Pashan, Pune, 411 008, India
SOURCE: Tetrahedron Letters (2004), 45(2), 421-423
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier Science B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 140:235917
IT **667870-37-3P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(concise stereoselective synthesis of (+)- and (-)-deoxoprosophylline)
RN 667870-37-3 CAPLUS
CN D-erythro-Hexonic acid, 2,3,5-trideoxy-5-[[(phenylmethoxy)carbonyl]amino]-6-O-(phenylmethyl)-, γ-lactone (9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI



I

AB An efficient synthesis of (+)- (I) and (-)-deoxoprosophylline was accomplished from the readily available cis-2-butene-1,4-diol in which the Sharpless asym. dihydroxylation was used as the key step.

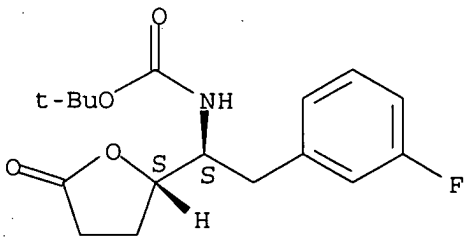
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 16 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:937491 CAPLUS
DOCUMENT NUMBER: 140:183565
TITLE: Process Research on [(2S)-(3-Fluorophenyl)-(1S)-(5-oxotetrahydrofuran- 2-yl)ethyl]carbamic Acid tert-Butyl Ester, a Lactone Intermediate for an Aspartyl Protease Inhibitor
AUTHOR(S): Urban, Frank J.; Jasys, V. John
CORPORATE SOURCE: Chemical Research and Development, Pfizer Global Research and Development, Groton, CT, 06340, USA
SOURCE: Organic Process Research & Development (2004), 8(2), 169-175
CODEN: OPRDFK; ISSN: 1083-6160
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

IT **344620-59-3P**, [(2S)-(3-Fluorophenyl)-(1S)-(5-oxotetrahydrofuran-2-yl)ethyl]carbamic acid tert-Butyl Ester
RL: IMF (Industrial manufacture); PREP (Preparation)
(process selection and scale-up for manufacture of [(S)-(fluorophenyl)-(S)-(oxotetrahydrofuranyl)ethyl]-t-Bu carbamate intermediate for aspartyl protease inhibitor)

RN 344620-59-3 CAPLUS
CN Carbamic acid, [(1S)-2-(3-fluorophenyl)-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



AB Two processes for the preparation of lactone [2S-(3-fluorophenyl)-1S-(5-oxotetrahydrofuran-2-yl)ethyl]carbamic acid tert-Bu ester (1) starting from S-BOC-(3-fluorophenyl)alanine (2) are described. (S)-(3-Fluorophenyl)alanine N-methyl-N-methoxy amide (3), the Weinreb amide of 2, was reacted with 2-(2-1,3-dioxanyl)ethylmagnesium bromide to provide key intermediate ketoacetal 4. To achieve high yields for this conversion, the N-H of the BOC group in Weinreb amino acid amide 3 was deprotonated first with a simple Grignard reagent (Me or benzylmagnesium halide) followed by Barbier reaction with magnesium metal and

2-(2-bromoethyl)-1,3-dioxane. The acetal group in 4 was opened oxidatively with ozone, and the resulting ester (5) was reduced selectively at low temperature with N-Selectride. Alternatively, the ketone moiety in 4 was reduced diastereoselectively with aluminum triisopropoxide in 2-propanol to give the undesired (R,S)-diastereomeric alc. The alc. was converted to the mesylate which was heated in solution to cause formation of oxazolidinone 6 through displacement of the mesylate group by the carbonyl moiety of the BOC group with loss of tert-Bu alc. This intramol. reaction provided the desired (S,S)-diastereomer. Finally, acetal 6 was converted to nitrile 7 with hydroxylamine hydrochloride in ethanol with toluenesulfonic acid as catalyst under reflux. Basic aqueous hydrolysis of nitrile 7 followed by treatment with di-tert-Bu dicarbonate provided 1. While the second process was longer, the inexpensive reagents, simple reaction conditions, and high yields made it the process of choice. Both processes were run on a multikilogram scale.

REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 17 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2003:913154 CAPLUS
DOCUMENT NUMBER: 139:381369
TITLE: Process for preparation of 5-(1-amino-2-arylethyl)-3-(3-hydroxy-3-methylbutyl)dihydrofuran-2-ones via treatment of 5-(1-protected-amino-2-arylethyl)-3-(3-methyl-2-butenyl)dihydrofuran-2-ones with phosphoric acid
INVENTOR(S): Urban, Frank John; Jasys, Vytautas John; Li, Zhengong Bryan; Kath, John Charles
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 62 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003095440	A1	20031120	WO 2003-IB1840	20030505
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1503999	A1	20050209	EP 2003-719022	20030505
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
US 2004019217	A1	20040129	US 2003-431276	20030507
US 6858744	B2	20050222		

PRIORITY APPLN. INFO.:
US 2002-380694P P 20020514
US 2002-397138P P 20020718
WO 2003-IB1840 W 20030505

OTHER SOURCE(S): MARPAT 139:381369
IT **344620-59-3**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of aminoarylethylhydroxymethylbutyldihydrofuranones via treatment of protected aminoarylethylmethylbutenyldihydrofuranones with

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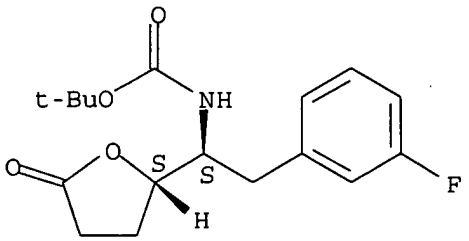
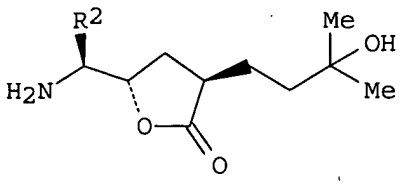
phosphoric acid)
RN 344620-59-3 CAPLUS
CN Carbamic acid, [(1S)-2-(3-fluorophenyl)-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



GI



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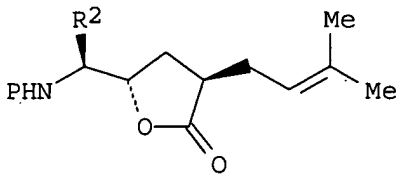


II

AB Title compds. [I; R2 = (substituted) Ph(CH2)m, naphthyl(CH2)m, cycloalkyl(CH2)m, alkyl(CH2)m, heteroaryl(CH2)m; m = 0-4] were prepared by treatment of alkenes (II; P = protecting group; R2 as above) with H3PO4. Thus, [2-(3-fluorophenyl)-1-[4-(3-methylbut-2-enyl)-5-oxotetrahydrofuran-2-yl]ethyl]carbamic acid tert-Bu ester (preparation given) was stirred with CH2Cl2 and 85% H3PO4 for 7h followed by cooling to 0°, dilution with water, and addition of 20% NaOH to pH 7-8.5 to give 5-[1-amino-2-(3-fluorophenyl)ethyl]-3-(3-hydroxy-3-methylbutyl)dihydrofuran-2-one. The latter was used to prepare quinoxaline-2-carboxylic acid [2-(3-fluorophenyl)-1-[4-(3-hydroxy-3-methylbutyl)-5-oxotetrahydrofuran-2-yl]ethyl]amide.
REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 20 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2002:925001 CAPLUS
DOCUMENT NUMBER: 139:46900
TITLE: Synthesis and γ-secretase activity of APP substrate-based hydroxyethylene dipeptide isosteres
AUTHOR(S): Nadin, Alan; Owens, Andrew P.; Castro, Jose L.; Harrison, Timothy; Shearman, Mark S.
CORPORATE SOURCE: Merck Sharp & Dohme Research Laboratories, Department of Medicinal Chemistry, The Neuroscience Research Centre, Harlow, Essex, CM20 2QR, UK
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(1), 37-41
CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **153025-80-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

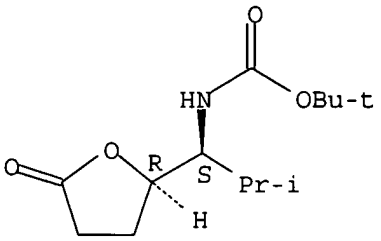
10/687,153R>

(Reactant or reagent)
(synthesis and γ-secretase activity of APP substrate-based hydroxyethylene dipeptide isosteres)

RN 153025-80-0 CAPLUS

CN Carbamic acid, [(1S)-2-methyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]propyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



AB Two new APP substrate-based hydroxyethylene isosteres (AT and VI) were prepared and their dipeptide conjugates shown not to inhibit the γ-secretase-mediated formation of either Aβ1-40 or Aβ1-42. The FG isostere and a des-hydroxy hydroxyethylene isostere also gave inactive compds. Conversely, a number of compds. containing the intact substrate-unrelated Phe-Phe (FF) hydroxyethylene isostere were shown to be potent inhibitors (ED50=14-732 nM). These results show that the factors governing the substrate-based design of γ-secretase inhibitors are more complicated than first thought.

REFERENCE COUNT: 27 THERE ARE 27 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 21 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:521789 CAPLUS

DOCUMENT NUMBER: 137:90187

TITLE: Inhibitors of memapsin 2 and their use in Alzheimer's disease treatment

INVENTOR(S): Tang, Jordan J. N.; Koelsch, Gerald; Ghosh, Arun K.

PATENT ASSIGNEE(S): Oklahoma Medical Research Foundation, USA; The Board of Trustees of the University of Illinois

SOURCE: PCT Int. Appl., 74 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002053594	A2	20020711	WO 2001-US50826	20011228
WO 2002053594	A3	20040108		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2433446	AA	20020711	CA 2001-2433446	20011228
EP 1404718	A2	20040407	EP 2001-987523	20011228

10/687,153R>

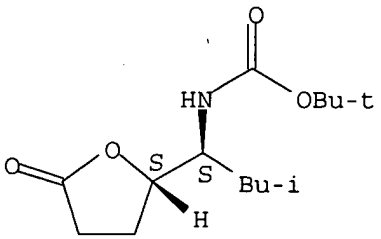
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR

JP 2005500979	T2	20050113	JP 2002-555116		20011228
US 2004121947	A1	20040624	US 2002-281092		20021023
PRIORITY APPLN. INFO.:			US 2000-258705P	P	20001228
			US 2001-275756P	P	20010314
			US 2001-335952P	P	20011023
			US 2001-333545P	P	20011127
			US 2001-32818	A2	20011228
			WO 2001-US50826	W	20011228
			US 2002-348464P	P	20020114
			US 2002-348615P	P	20020114
			US 2002-390804P	P	20020620
			US 2002-397557P	P	20020719
			US 2002-397619P	P	20020719

IT **105018-81-3P 105018-83-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(inhibitors of memapsin 2 and their use in Alzheimer's disease treatment)

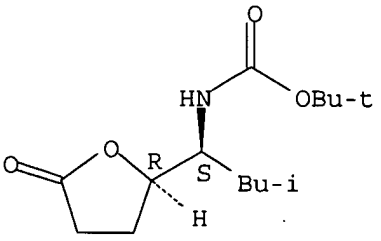
RN 105018-81-3 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 105018-83-5 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

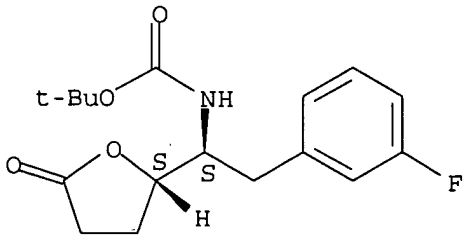


AB Methods for the production of purified, catalytically active, recombinant memapsin 2 have been developed. The substrate and subsite specificity of the catalytically active enzyme have been determined by a method which dets. the initial hydrolysis rate of the substrate by using MALDI-TOF/MS. Alternatively, the subsite specificity of memapsin can be determined by probing a library of inhibitors with memapsin 2 and subsequently detecting the bound memapsin 2 with an antibody raised to memapsin 2 and an alkaline phosphatase conjugated secondary antibody. The substrate and subsite specificity information was used to design substrate analogs of the natural memapsin 2 substrate that can inhibit the function of memapsin 2.

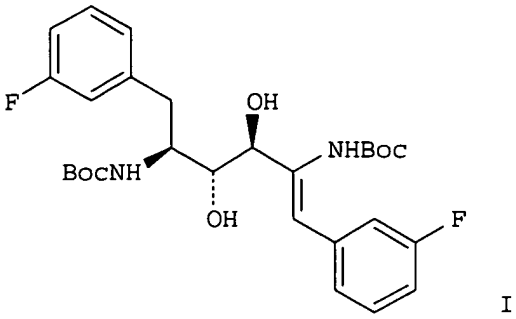
The substrate analogs are based on peptide sequences, shown to be related to the natural peptide substrates for memapsin 2. The substrate analogs contain at least one analog of an amide bond which is not capable of being cleaved by memapsin 2. Processes for the synthesis of substrate analogs including isosteres at the sites of the critical amino acid residues were developed and the more than seventy substrate analogs were synthesized, among which MMI-005, MMI-012, MMI-017, MMI-018, MMI-025, MMI-026, MMI-037, MMI-039, MMI-040, MMI-066, MMI-070, and MMI-071 have inhibition consts. in the range of 1.4-61.4 x 109 M against recombinant pro-memapsin 2. These inhibitors are useful in diagnostics and for the treatment and/or prevention of Alzheimer's disease.

L8 ANSWER 26 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:259361 CAPLUS
DOCUMENT NUMBER: 135:46391
TITLE: Observation of a new dimeric amino acid derivative in the reaction of methyl N-Boc-(S)-(3-fluorophenyl)alanate with DIBAL-H and lithio ethyl propiolate
AUTHOR(S): Jasys, V. J.; Urban, F. J.
CORPORATE SOURCE: Chemical Research and Development, Pfizer Global Research and Development, Groton, CT, 06340, USA
SOURCE: Tetrahedron: Asymmetry (2001), 12(3), 361-363
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 135:46391
IT **344620-59-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of a new dimeric amino acid from the reaction of N-Boc-(fluorophenyl)alanine Me ester with DIBAL-H and lithio Et propiolate)
RN 344620-59-3 CAPLUS
CN Carbamic acid, [(1S)-2-(3-fluorophenyl)-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



GI



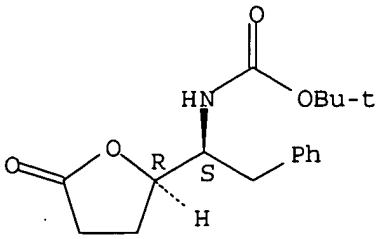
I

AB A novel amino acid dimer I was isolated while trying to apply a known reduction/nucleophilic addition sequence. This dimer provided information on both the mechanism of the process and on the dependence of the desired reaction on the stoichiometry of reagents.

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 27 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:155242 CAPLUS
DOCUMENT NUMBER: 134:340687
TITLE: A stereocontrolled synthesis of 2R-benzyl-5S-tert-butoxycarbonylamino-4R-(tert-butyldimethylsilanyloxy)-6-phenyl-hexanoic acid (Phe-Phe hydroxyethylene dipeptide isostere)
AUTHOR(S): Nadin, A.; Sanchez Lopez, J. M.; Neduvelil, J. G.; Thomas, S. R.
CORPORATE SOURCE: Department of Medicinal Chemistry, Merck Sharp and Dohme Research Laboratories, The Neuroscience Research Centre, Harlow, Essex, CM20 2QR, UK
SOURCE: Tetrahedron (2001), 57(9), 1861-1864
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 134:340687
IT **135130-98-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(stereocontrolled synthesis of benzyltertbutoxycarbonylaminotertbutyldimethylsilanyloxyphenylhexanoic acid)
RN 135130-98-2 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



AB 2R-Benzyl-5S-tert-butoxycarbonylamino-4R-(tert-butyldimethylsilanyloxy)-6-

phenyl-hexanoic acid, a hydroxyethylene dipeptide isostere corresponding to Phe-Phe, has been synthesized in a practical, stereocontrolled fashion from (L)-phenylalanine.

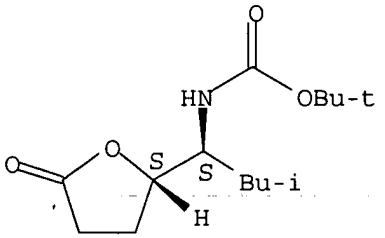
REFERENCE COUNT: 11 THERE ARE 11 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 31 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:188678 CAPLUS
DOCUMENT NUMBER: 133:12663
TITLE: Design of potent inhibitors for human brain memapsin 2 (β-secretase)
AUTHOR(S): Ghosh, Arun K.; Shin, Dongwoo; Downs, Debbie; Koelsch, Gerald; Lin, Xinli; Ermolieff, Jacques; Tang, Jordan
CORPORATE SOURCE: Department of Chemistry, University of Illinois at Chicago, Chicago, IL, USA
SOURCE: Journal of the American Chemical Society (2000), 122(14), 3522-3523
CODEN: JACSAT; ISSN: 0002-7863
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

IT **105018-81-3P 105018-83-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and activity of potent inhibitors for human brain memapsin 2 (β-secretase))

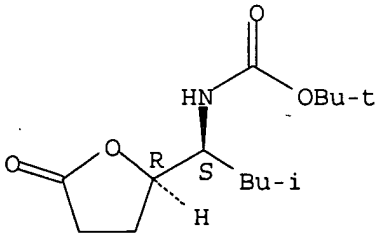
RN 105018-81-3 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 105018-83-5 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

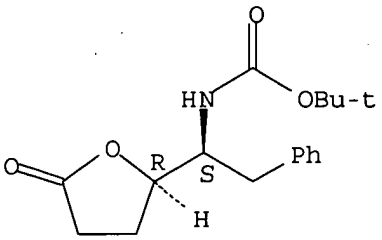


AB Two highly potent inhibitors of human memapsin 2 were designed and synthesized from current available specificity information. The inhibitors, OM99-1 and OM99-2, were tested for inhibition of recombinant

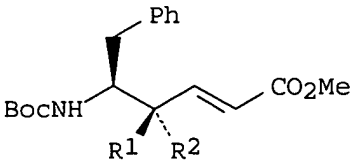
human memapsin 2 prepared from E. coli expression.
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 32 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:735993 CAPLUS
DOCUMENT NUMBER: 132:122924
TITLE: Synthesis of a complete series of C-4 fluorinated Phe-Gly mimetics
AUTHOR(S): Berts, Wei; Luthman, Kristina
CORPORATE SOURCE: Department of Organic Pharmaceutical Chemistry, Uppsala Biomedical Centre, Uppsala University, Uppsala, S-751 23, Swed.
SOURCE: Tetrahedron (1999), 55(48), 13819-13830
CODEN: TETRAB; ISSN: 0040-4020
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **135130-98-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(synthesis of both unsatd. and saturated fluorinated mimetics of Boc-Phe-Gly-OMe)
RN 135130-98-2 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

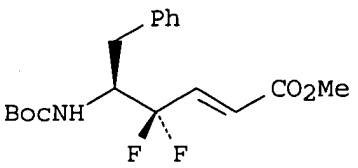
Absolute stereochemistry. Rotation (-).



GI



I



II

AB The complete series of allylic monofluorinated derivs. I (R1 = H, R2 = F; R1 = F, R2 = H) and difluorinated derivs. II of Boc-Phe-Gly-OMe has been synthesized using facile methods. The saturated derivs. of I and II were also synthesized. Diastereomeric allylic alc. derivs. were used as key intermediates. Cis- and trans-aziridine derivs. were synthesized in high yields from the diastereomeric alcs. using Mitsunobu conditions. The aziridines were treated with diethylaminosulfur trifluoride (DAST) at room temperature, which resulted in stereoselective ring openings yielding the monofluorinated derivs. The difluorinated isostere was synthesized from the γ-keto ester derivative using DAST.
REFERENCE COUNT: 68 THERE ARE 68 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 33 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:511130 CAPLUS
DOCUMENT NUMBER: 131:157767
TITLE: Preparation of quinoxalinecarboxylic acid 4-carbamoyl-2,7-dihydroxy-7-methyloctylamides for treatment of inflammation and immune disorders.
INVENTOR(S): Kath, John Charles; Brown, Matthew Frank; Poss, Christopher Stanley
PATENT ASSIGNEE(S): Pfizer Products Inc., USA
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

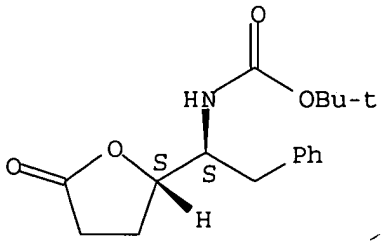
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9940061	A2	19990812	WO 1999-IB67	19990118
WO 9940061	A3	19991021		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2320388	AA	19990812	CA 1999-2320388	19990118
AU 9917789	A1	19990823	AU 1999-17789	19990118
AU 752407	B2	20020919		
BR 9907655	A	20001024	BR 1999-7655	19990118
EP 1051405	A2	20001115	EP 1999-900098	19990118
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
TR 200002248	T2	20001221	TR 2000-200002248	19990118
JP 2002502839	T2	20020129	JP 2000-530493	19990118
NZ 505724	A	20030228	NZ 1999-505724	19990118
NZ 523610	A	20040827	NZ 1999-523610	19990118
TW 470744	B	20020101	TW 1999-88101505	19990201
ZA 9900873	A	20000804	ZA 1999-873	19990204
AP 992	A	20010806	AP 1999-1457	19990204
W: BW, GM, GH, KE, MW, SD, UG, ZM, ZW				
US 6673801	B1	20040106	US 2000-403218	20000302
NO 2000003965	A	20001003	NO 2000-3965	20000804
HR 2000000529	A1	20010831	HR 2000-529	20000804
HR 20000529	B1	20041231		
BG 104726	A	20010430	BG 2000-104726	20000829
US 2003018033	A1	20030123	US 2002-200844	20020722

PRIORITY APPLN. INFO.:		
US 1998-73801P	P	19980205
NZ 1999-505724	A1	19990118
WO 1999-IB67	W	19990118
US 2000-403218	A1	20000302

IT **133333-27-4 236733-86-1**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of quinoxalinecarboxylic acid 4-carbamoyl-2,7-dihydroxy-7-methyloctylamides for treatment of inflammation and immune disorders)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

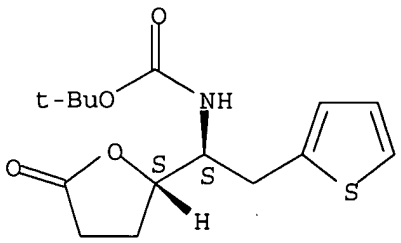
10/687,153R>

Absolute stereochemistry. Rotation (-).

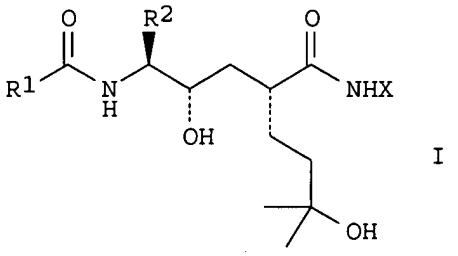


RN 236733-86-1 CAPLUS
CN Carbamic acid, [(1S)-1-[(2S)-tetrahydro-5-oxo-2-furanyl]-2-(2-thienyl)ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI



I

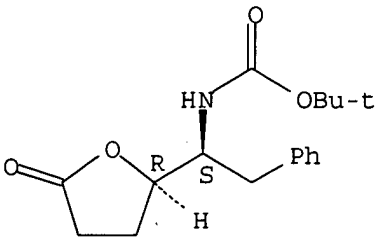
AB Title compds. (I; all variables undefined), were prepared as antagonists of CCR1 receptors. Thus, [1(S)-[5-oxotetrahydrofuran-2(S)-yl]-2-phenylethyl]carbamic acid tert-Bu ester in THF was added dropwise to a mixture of BuLi and HN(SiMe3)2 in THF at -78°; 4-bromo-2-methyl-2-butane in THF was added after 30 min. and the mixture was stirred 3h to -60° to give 77% [1(S)-[4(R)-(3-methylbut-2-enyl)-5-oxotetrahydrofuran-2(S)-yl]-2-phenylethyl]carbamic acid tert-Bu ester. The latter was stirred with CF3CO2H and the residue was stirred with 2-quinoxalyl chloride and Et3N in CH2Cl2 to give 72% quinoxaline-2-carboxylic acid 1(S)-benzyl-4(R)-carbamoyl-2(S),7-dihydroxy-7-methyloctylamide. Tested I inhibited chemotaxis with IC50 <25 μM.

L8 ANSWER 34 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:333805 CAPLUS
DOCUMENT NUMBER: 131:144812
TITLE: Asymmetric dihydroxylation route to a dipeptide isostere of a protease inhibitor: enantioselective synthesis of the core unit of ritonavir
AUTHOR(S): Ghosh, Arun K.; Shin, Dongwoo; Mathivanan, Packiarajan

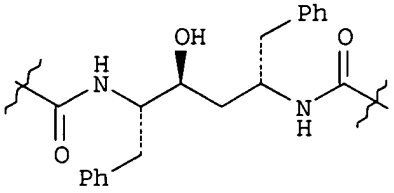
10/687,153R>

CORPORATE SOURCE: Department of Chemistry, University of Illinois at Chicago, Chicago, IL, USA
SOURCE: Chemical Communications (Cambridge) (1999), (11), 1025-1026
CODEN: CHCOFS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **135130-98-2P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(enantioselective synthesis of the dipeptide isostere unit of ritonavir)
RN 135130-98-2 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



GI



I

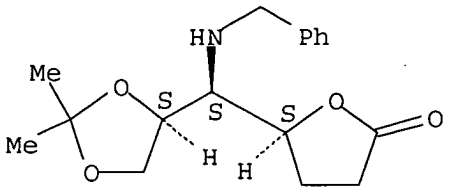
AB An enantioselective synthesis of the dipeptide isostere (I) of ritonavir has been accomplished utilizing Sharpless asym. hydroxylation as the key step.
REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 35 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1999:296033 CAPLUS
DOCUMENT NUMBER: 131:58732
TITLE: Diastereoselective synthesis of a novel lactam peptidomimetic exploiting vinylogous Mannich addition of 2-(silyloxy)furan reagents
AUTHOR(S): Battistini, Lucia; Rassu, Gloria; Pinna, Luigi; Zanardi, Franca; Casiraghi, Giovanni
CORPORATE SOURCE: Dipartimento Farmaceutico dell'Universita, Viale delle Scienze, Parma, I-43100, Italy
SOURCE: Tetrahedron: Asymmetry (1999), 10(4), 765-773
CODEN: TASYE3; ISSN: 0957-4166
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal

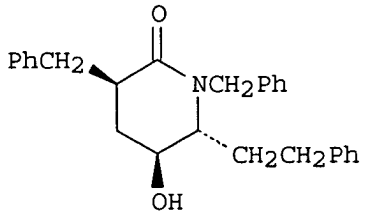
10/687,153R>

LANGUAGE: English
OTHER SOURCE(S): CASREACT 131:58732
IT **227780-31-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(diastereoselective preparation of lactam peptidomimetic via vinylogous Mannich addition of 2-(silyloxy)furan reagent)
RN 227780-31-6 CAPLUS
CN D-ribo-Heptonic acid, 2,3,5-trideoxy-6,7-O-(1-methylethylidene)-5-[(phenylmethyl)amino]-, γ-lactone (9CI) (CA INDEX NAME)

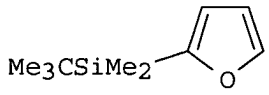
Absolute stereochemistry. Rotation (+).



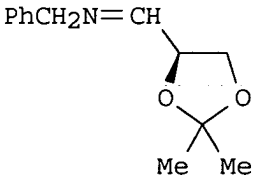
GI,



I



II



III

AB The total synthesis of a potential inhibitor of HIV-protease, namely, the chiral nonracemic six-membered hydroxy lactam I, has been accomplished. The key reaction was the highly diastereoselective vinylogous Mannich addition of furan-based silyloxy diene II to glyceraldehyde imine III.
REFERENCE COUNT: 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 36 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:608600 CAPLUS
DOCUMENT NUMBER: 129:230740
TITLE: Heteroaryl-hexanoic acid amide derivatives, their preparation and their use as selective inhibitors of MIP-1α binding to its CCR1 receptor
INVENTOR(S): Brown, Matthew Frank; Kath, John Charles; Poss, Christopher Stanley
PATENT ASSIGNEE(S): Pfizer Inc., USA

SOURCE: PCT Int. Appl., 106 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9838167	A1	19980903	WO 1998-US1568	19980205
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9861354	A1	19980918	AU 1998-61354	19980205
AU 745687	B2	20020328		
EP 966443	A1	19991229	EP 1998-906013	19980205
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, SI, LT, LV, FI, RO				
TR 9902056	T2	20000121	TR 1999-9902056	19980205
BR 9807858	A	20000222	BR 1998-7858	19980205
JP 2000513740	T2	20001017	JP 1998-537644	19980205
CA 2282834	C	20041005	CA 1998-2282834	19980205
CA 2282834	AA	19980903		
ZA 9801602	A	19990921	ZA 1998-1602	19980226
AP 1056	A	20020405	AP 1998-1200	19980226
W: BW, GM, KE, MW, UG, ZM, ZW				
BG 103688	A	20001130	BG 1999-103688	19990824
NO 9904101	A	19990825	NO 1999-4101	19990825
US 6403587	B1	20020611	US 2000-380269	20000518
US 2002198207	A1	20021226	US 2002-154145	20020522

PRIORITY APPLN. INFO.:
US 1997-39169P P 19970226
WO 1998-US1568 W 19980205
US 2000-380269 A3 20000518

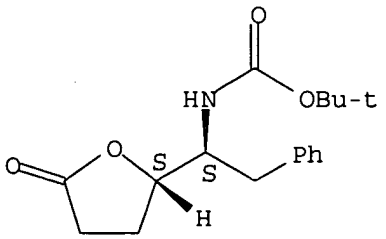
OTHER SOURCE(S): MARPAT 129:230740

IT **133333-27-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of heteroaryl-substituted hexanamides and their use as selective inhibitors of MIP-1α binding to its CCR1 receptor)

RN 133333-27-4 CAPLUS

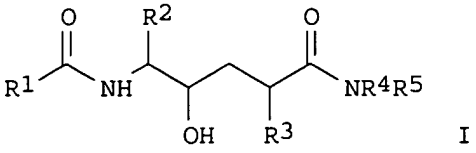
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



GI

10/687,153R>



I

AB I [R1 = optionally substituted (C2-C9)heteroaryl; R2 = optionally substituted phenyl-(CH2)m-, naphthyl-(CH2)m-, (C3-C10)cycloalkyl-(CH2)m-, (C1-C6)alkyl or (C2-C9)heteroaryl-(CH2)m-; m = integer from zero to four; R3 = H, optionally substituted (C1-C10)alkyl, (C3-C10)cycloalkyl-(CH2)n-, (C2-C9)heterocycloalkyl-(CH2)n-, (C2-C9)heteroaryl-(CH2)n-, aryl-(CH2)n-; n = integer from zero to six; R3 and the carbon to which it is attached form an optionally substituted and/or fused five to seven membered carbocyclic ring; R4 = H, (C1-C6)alkyl, hydroxy, (C1-C6)alkoxy, hydroxy-(C1-C6)alkyl, (C1-C6)alkoxyCO, (C3-C10)cycloalkyl-(CH2)p-, optionally substituted (C2-C9)heterocycloalkyl-(CH2)p-, (C2-C9)heteroaryl-(CH2)p-, phenyl-(CH2)p- or naphthyl-(CH2)p-, p = integer from zero to four; R4 and R5 together with the nitrogen atom to which they are attached form an optionally substituted (C2-C9)heterocycloalkyl group; R5 = H, (C1-C6)alkyl, amino] were prepared The present compds. are potent and selective inhibitors of MIP-1α binding to its receptor CCR1, and are thus useful to treat inflammation and other immune disorders. E.g., quinoxaline-2-carboxylic acid [1(S)-benzyl-4(R)-benzylcarbamoyl-7-fluoro-2(S)-hydroxy-7-methyloctyl]amide was prepared

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

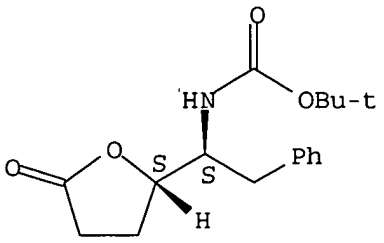
L8 ANSWER 37 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:503350 CAPLUS
DOCUMENT NUMBER: 129:260815
TITLE: Transition-State Mimetics for HIV Protease Inhibitors: Stereocontrolled Synthesis of Hydroxyethylene and Hydroxyethylamine Isosteres by Ester-Derived Titanium Enolate Syn and Anti-Aldol Reactions
AUTHOR(S): Ghosh, Arun K.; Fidanze, Steve
CORPORATE SOURCE: Department of Chemistry, University of Illinois at Chicago, Chicago, IL, 60607, USA
SOURCE: Journal of Organic Chemistry (1998), 63(18), 6146-6152
CODEN: JOCEAH; ISSN: 0022-3263
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal
LANGUAGE: English

IT **133333-27-4P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of peptide isosteres as HIV protease inhibitors)

RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

10/687,153R>



AB Stereocontrolled syntheses of hydroxyethylene dipeptide isosteres and aminoalkyl epoxides for hydroxyethylamine isosteres are described. The stereochem. of both stereogenic centers of the aminoalkyl epoxides and of a γ-lactone was assembled by a recently developed highly selective ester-derived titanium enolate aldol reactions. The Ti-enolate of (1S,2R)-cis-N-[2,3-dihydro-2-(3-phenyl-1-oxopropoxy)-1H-inden-2-yl]-4-methylbenzenesulfonamide reacted with (benzyloxy)acetaldehyde and cinnamaldehyde to provide the syn- and anti-aldol products, resp. Removal of the chiral template followed by Curtius rearrangement of the resulting acid provided the desired amine functionality. The present syntheses represent practical and enantioselective entry to a range of other dipeptide isosteres, which are not limited to amino acid derived substituents.

REFERENCE COUNT: 48 THERE ARE 48 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 45 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:356489 CAPLUS
DOCUMENT NUMBER: 126:330548
TITLE: Preparation of mercaptoamide derivatives as metalloproteinase, TNFα and L-selectin sheddase inhibitors.
INVENTOR(S): Baxter, Andrew Douglas; Montana, John; Watson, Robert John; Tiffin, Peter David
PATENT ASSIGNEE(S): Chiroscience Limited, UK; Baxter, Andrew Douglas; Montana, John; Watson, Robert John; Tiffin, Peter David
SOURCE: PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9712861	A1	19970410	WO 1996-GB2439		19961004
W: AL, AM, AU, AZ, BB, BG, BR, BY, CA, CN, CZ, EE, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, RO, RU, SD, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM					
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG					
AU 9671399	A1	19970428	AU 1996-71399		19961004
PRIORITY APPLN. INFO.:			GB 1995-20360	A	19951005
			GB 1995-25648	A	19951215
			WO 1996-GB2439	W	19961004

OTHER SOURCE(S): MARPAT 126:330548
IT **105018-81-3**

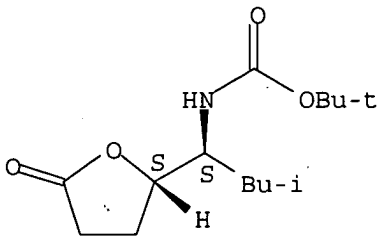
10/687,153R>

RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of mercaptoamide derivs. as metalloproteinase, TNFα and L-selectin sheddase inhibitors)

RN 105018-81-3 CAPLUS

CN Carbamic acid, [(1S)-3-methyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



AB R6SCHR7CONHCHR1YCH2CHR2COX [R1 = alkyl, alkenyl, alkylaryl, alkylheteroaryl, etc; R2 = XmR5; X = alkyl, alkenyl; m = 0, 1; X = (substituted) amino; Y = CHOH, CHNH2 or CO; R6 = H, alkylcarbonyl, arylcarbonyl; R7 = (substituted) aryl, heteroaryl, alkyl, cycloalkyl, alkenyl, etc.] were prepared as metalloproteinase, TNFα and L-selectin sheddase inhibitors (no data). Thus, (5S)-5-[(1S)-1-[N-[(1,1-dimethylethoxy)carbonyl]amino]-3-methylbutyl]dihydrofuran-2(3H)-one in THF and then PhCH2Br were added to a mixture of BuLi and (Me3Si)2NH in THF at -78° to -40° to give 26% (3S,5S)-3-benzyl-5-[(1S)-1-[N-[(1,1-dimethylethoxy)carbonyl]amino]-3-methylbutyl]dihydrofuran-2(3H)-one. The latter was stirred with aqueous MeNH2 in THF at 70° to give 71% (2S,4S,5S)-N-methyl-2-benzyl-4-hydroxy-5-[[(1,1-dimethylethoxy)carbonyl]amino]-7-methyloctanamide. This was stirred 2 h in CF3CO2H/CH2Cl2 and the residue was stirred overnight with 2-acetylthio-5-phthalimidopentanoic acid, HOBT, and EDC in THF to give (2S,4S,5S,2'S)-N-methyl-2-benzyl-4-hydroxy-5-[N-[(2'-acetylthio)-5'-phthalimidopentanoyl]amino]-7-methyloctanamide.

L8 ANSWER 49 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 1996:335954 CAPLUS

DOCUMENT NUMBER: 125:10631

TITLE: Preparation of 2,9-diamino- and 2-amino-8-carbamoyl-4-hydroxyalkanoic acid amides as renin inhibitors

INVENTOR(S): Rasetti, Vittorio; Rueeger, Heinrich; Maibaum, Juergen Klaus; Mah, Robert; Gruetter, Markus; Cohen, Nissim Claude

PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.

SOURCE: Eur. Pat. Appl., 115 pp.
CODEN: EPXXDW

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 702004	A2	19960320	EP 1995-113964	19950906
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AU 9530534	A1	19960328	AU 1995-30534	19950908
US 5719141	A	19980217	US 1995-525254	19950908
FI 9504255	A	19960316	FI 1995-4255	19950911
CA 2158227	AA	19960316	CA 1995-2158227	19950913

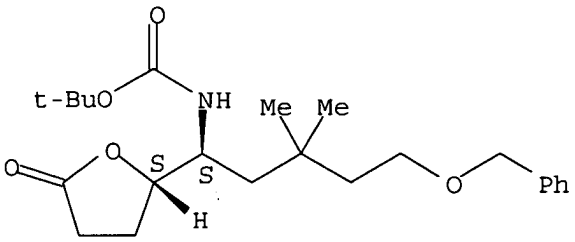
ZA 9507726	A	19960315	ZA 1995-7726		19950914
NO 9503629	A	19960318	NO 1995-3629		19950914
HU 74453	A2	19961230	HU 1995-2684		19950914
CN 1169986	A	19980114	CN 1995-118418		19950914
JP 08176087	A2	19960709	JP 1995-238779		19950918
PRIORITY APPLN. INFO.:			CH 1994-2816	A	19940915

OTHER SOURCE(S): MARPAT 125:10631

IT **177200-09-8P 177202-54-9P 177202-85-6P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2,9-diamino- and 2-amino-8-carbamoyl-4-hydroxyalkanoic acid amides as renin inhibitors)

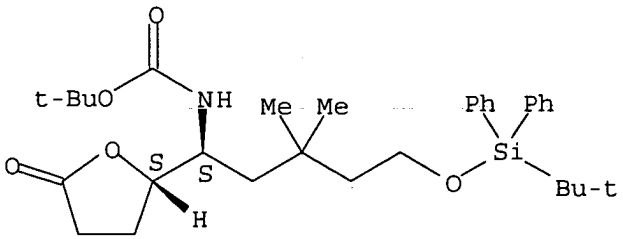
RN 177200-09-8 CAPLUS
CN Carbamic acid, [3,3-dimethyl-5-(phenylmethoxy)-1-(tetrahydro-5-oxo-2-furanyl)pentyl]-, 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



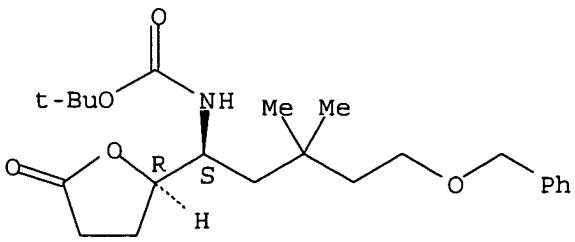
RN 177202-54-9 CAPLUS
CN Carbamic acid, [5-[[(1,1-dimethylethyl)diphenylsilyl]oxy]-3,3-dimethyl-1-(tetrahydro-5-oxo-2-furanyl)pentyl]-, 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



RN 177202-85-6 CAPLUS
CN Carbamic acid, [3,3-dimethyl-5-(phenylmethoxy)-1-(tetrahydro-5-oxo-2-furanyl)pentyl]-, 1,1-dimethylethyl ester, [R-(R*,S*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

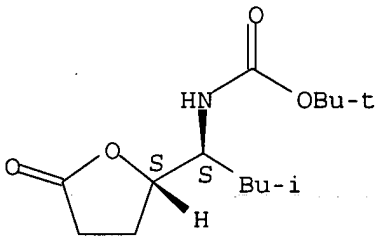


10/687,153R>

AB R1XCH2CR2R3CH2CH(NHR4)CHR5CH2CR6R7CONHR8 [I; R1 = arylamino, N-aryl-N-aralkylamino, N-attached heterocyclyl, etc.; R3,R3,R7 = H or alkyl; R2R3 = alkylene; R4 = H, alkyl, alkanoyl, alkoxycarbonyl; R5 = OH, alkanoyloxy, alkoxycarbonyloxy; R6 = H, (ar)alkyl, alkenyl, etc.; R6R7 = alkylene; R8 = (cyclo)aliphatic group, heteroaliph. group; X = CO or CH2] were prepared Thus, quinoline-3-carboxylic acid was converted in 21 steps to N-butyl-(2R,4S,5S)-5-amino-4-hydroxy-2,7,7-trimethyl-8-(3RS-methoxycarbonyl-1,2,3,4-tetrahydroquinolin-1-carbonyl)octanamide. I gave inhibition of human renin at .apprx.10-6 to .apprx.10-10M in vitro.

L8 ANSWER 50 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1996:154365 CAPLUS
DOCUMENT NUMBER: 124:317813
TITLE: Synthesis of optically active hydroxy amino acids via 2-O-benzylglyceraldehyde N-[(R)-1-phenylethyl]imine
AUTHOR(S): Meunier, Nathalie; Veith, Ulrich; Jaeger, Volker
CORPORATE SOURCE: Inst. Org. Chem., Univ. Stuttgart, Stuttgart, D-70569, Germany
SOURCE: Chemical Communications (Cambridge) (1996), (3), 331-2
CODEN: CHCOFS; ISSN: 1359-7345
PUBLISHER: Royal Society of Chemistry
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **105018-81-3P**
RL: BYP (Byproduct); PREP (Preparation)
(synthesis of optically active statine analogs)
RN 105018-81-3 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



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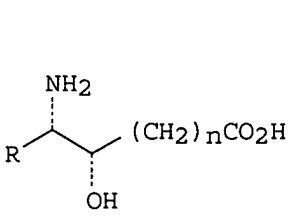
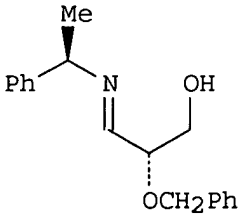


I

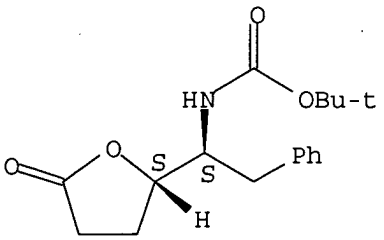


II

AB N-Boc esters of hydroxy amino acids I (n = 0, R = Ph, i-Bu; n = 1, R = i-Bu, TMSCH2; n = 2, R = i-Bu) are prepared in 4 to 5 steps from 2-O-benzylglyceraldehyde imine II. These syntheses present new, practical, stereoselective routes to compds. I of the statine family.

L8 ANSWER 58 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:515794 CAPLUS
DOCUMENT NUMBER: 123:228872
TITLE: A formal stereoselective synthesis of a hydroxyethylene dipeptide isostere
AUTHOR(S): Peyrat, Jean-Francois; Chaboche, Christophe; Figadere, Bruno; Cave, Andre
CORPORATE SOURCE: Lab. Pharmacognosie, Fac. Pharm., Chatenay-Malabry, 92296, Fr.
SOURCE: Tetrahedron Letters (1995), 36(16), 2757-60
CODEN: TELEAY; ISSN: 0040-4039
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 123:228872
IT **133333-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(formal stereoselective synthesis of hydroxyethylene dipeptide isostere)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



AB 4-Hydroxy-5-amino-6-phenyl-4-hexanolide has been synthesized from a very inexpensive chiral starting material, L-glutamic acid. The key steps were an original reduction of carbonyl of a ketone with n-Bu3SnH in the present of silica gel, followed by an SN2 displacement of a mesylate group with sodium azide.

L8 ANSWER 59 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:513639 CAPLUS
DOCUMENT NUMBER: 122:256403
TITLE: HIV aspartate protease inhibitors as antitumor agents
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Jpn. Kokai Tokkyo Koho, 23 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

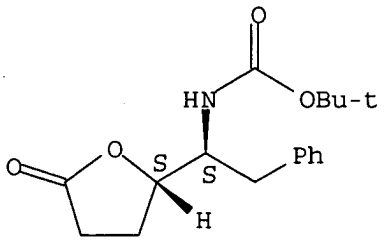
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 06329552	A2	19941129	JP 1994-101029	19940516
PRIORITY APPLN. INFO.:			CH 1992-1492 A	19930517

OTHER SOURCE(S): MARPAT 122:256403
IT **133333-27-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(HIV aspartate protease inhibitors as antitumor agents)

10/687,153R>

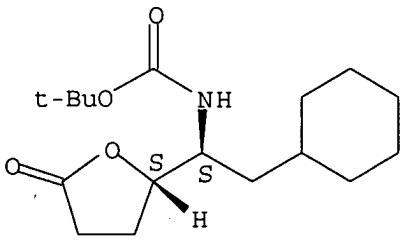
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



IT **112227-09-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(HIV aspartate protease inhibitors as antitumor agents)
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



AB The HIV aspartate protease inhibitors statine-containing dipeptides, such as tert-butoxycarbonyl-5-(S)-amino-2-(R)-benzyl-4-(S)-hydroxy-6-phenylhexanoyl-L-Val-L-Phe-morpholin-4-ylamide (I), are prepared and showed antitumor activity. I inhibited the growth of human mammary gland cancer cells in female mice. Tablets were prepared containing I 1000, corn starch 680, colloidal silicate 200, magnesium stearate 20, stearic acid 50, Na CM-starch 250g, and an appropriate amount of water.

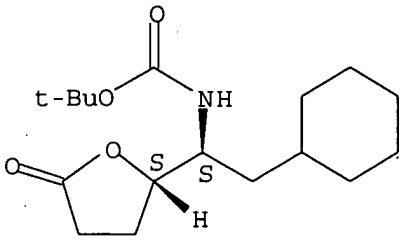
L8 ANSWER 60 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:328907 CAPLUS
DOCUMENT NUMBER: 123:199334
TITLE: Synthesis, antiviral activity, and bioavailability studies of γ-lactam derived HIV protease inhibitors
AUTHOR(S): Hungate, Randall W.; Chen, Jenny L.; Starbuck, Ken E.; Vacca, Joseph P.; McDaniel, Stacey L.; Levin, Rhonda B.; Dorsey, Bruce D.; Guare, James P.; Holloway, M. Katharine; et al.
CORPORATE SOURCE: Merck Research Laboratories, West Point, PA, 19486, USA
SOURCE: Bioorganic & Medicinal Chemistry (1994), 2(9), 859-79
CODEN: BMECEP; ISSN: 0968-0896
PUBLISHER: Elsevier
DOCUMENT TYPE: Journal
LANGUAGE: English

10/687,153R>

IT **112227-09-5 133333-27-4 167640-77-9**
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation, antiviral, and HIV-1 protease inhibitory activity of γ-lactams)

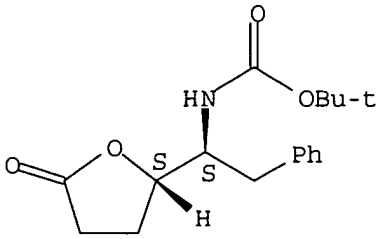
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



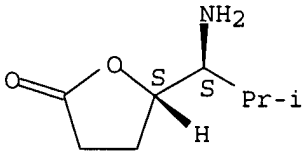
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

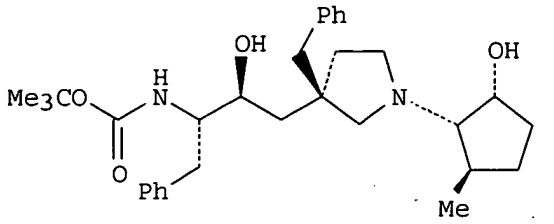


RN 167640-77-9 CAPLUS
CN 2(3H)-Furanone, 5-(1-amino-2-methylpropyl)dihydro-, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

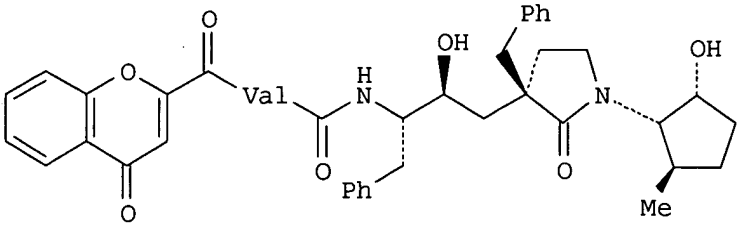
Absolute stereochemistry.



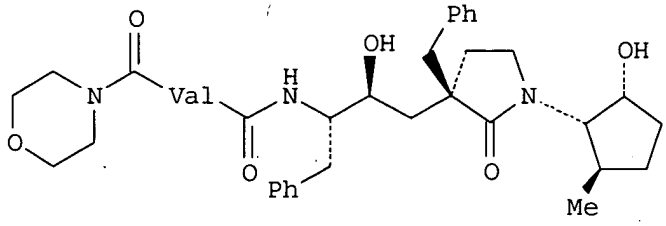
GI



I



II



III

AB Incorporation of a γ-lactam in hydroxyethylene isosteres results in modest inhibitors of HIV-1 protease. Addnl. structural activity studies have produced significantly more potent inhibitors with the introduction of the trisubstituted cyclopentane (e.g., pyrrolidinone I) as the optimum substituent for the C-terminus. This new amino acid amide surrogate can be readily prepared in large scale from (R)-pulegone. Optimized compds. (valinylamino) pyrrolidinones II and III are potent antiviral agents and are well absorbed (15-20%) in a dog model after oral administration.

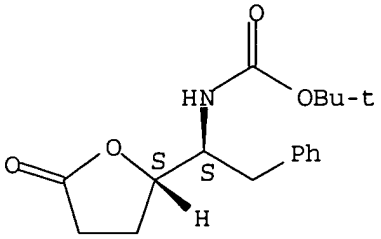
L8 ANSWER 61 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:309078 CAPLUS
DOCUMENT NUMBER: 122:72014
TITLE: Use of inhibitors of HIV proteases for the treatment of tumorous diseases
INVENTOR(S): Roesel, Johannes; Regenass, Urs; Lang, Marc; Bold, Guido; Cumin, Frederic
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 27 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 626178	A1	19941130	EP 1994-810274	19940509
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, NL, PT, SE				
AU 9463010	A1	19941124	AU 1994-63010	19940510
AU 678574	B2	19970605		
CA 2123523	AA	19941118	CA 1994-2123523	19940513
ZA 9403342	A	19941117	ZA 1994-3342	19940516
CN 1108955	A	19950927	CN 1994-105544	19940516

10/687,153R>

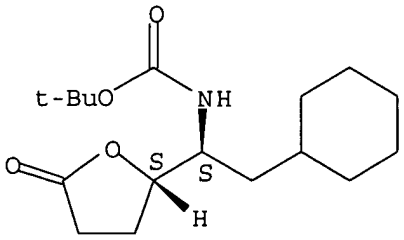
US 5663168 A 19970902 US 1994-242915 19940516
PRIORITY APPLN. INFO.: CH 1993-1492 A 19930517
OTHER SOURCE(S): MARPAT 122:72014
IT **133333-27-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(inhibitors of HIV proteases for treatment of tumorous diseases)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

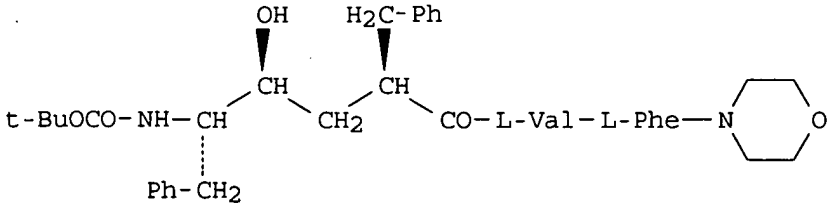


IT **112227-09-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(inhibitors of HIV proteases for treatment of tumorous diseases)
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI

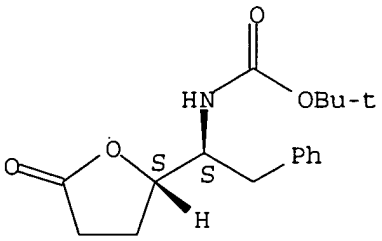


I

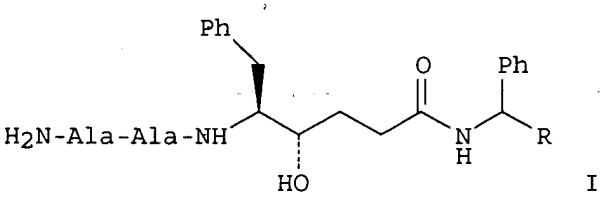
AB Inhibitors of HIV (human immunodeficiency virus) aspartate proteinases, and their salts and prodrugs, inhibit the growth of tumors, especially of those which do not respond directly to inhibition of HIV proteinase. Thus, growth of s.c. transplanted human mammary carcinoma MCF-7 in mice was inhibited by administration twice a day of peptide I (preparation given) (50 mg/kg orally as aqueous solution containing 5% DMSO and 20% hydroxypropyl-β-cyclodextrin).

L8 ANSWER 62 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1995:16635 CAPLUS
DOCUMENT NUMBER: 122:81974
TITLE: Crystal-Structure-Based Design and Synthesis of Novel C-Terminal Inhibitors of HIV Protease
AUTHOR(S): Varney, Michael D.; Appelt, Krzysztof; Kalish, Vince; Reddy, M. Rami; Tatlock, John; Palmer, Cindy L.; Romines, William H.; Wu, Bor-Wen; Musick, Linda
CORPORATE SOURCE: Agouron Pharmaceuticals Inc., San Diego, CA, 92121, USA
SOURCE: Journal of Medicinal Chemistry (1994), 37(15), 2274-84
CODEN: JMCMAR; ISSN: 0022-2623
DOCUMENT TYPE: Journal
LANGUAGE: English
IT **133333-27-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of HIV protease inhibitors)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



GI



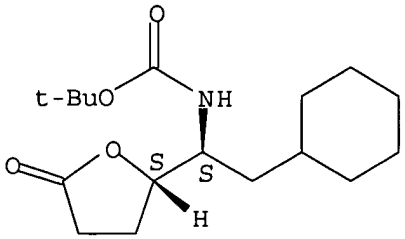
I

AB The X-ray crystal-structure-based design, synthesis, computational evaluation, and activity of a novel class of HIV protease inhibitors are described. The initial lead compds. I [R = Ph, 2-indolyl] were designed by modeling replacement groups for the C-terminal Val-Val-OMe of a known hydroxyethylene inhibitor into the active site of the reported crystal structure of HIV protease complexed with MVT-101. I [R = Ph] was a modest inhibitor with a Ki = 1.67 μM. The X-ray crystal structure of I [R = Ph] complexed with HIV protease was solved and used for subsequent design. I [R = 2-indolyl] was a more potent inhibitor with Ki = 0.2 μM, and the structure of it complexed with HIV protease was also solved and used for subsequent design. Modification of both the C-terminus and N-terminus of I [R = 2-indolyl] resulted in compds. with Ki = 30 nM. Using the crystal structures of I with HIV protease as a starting point, the thermodn. cycle perturbation mol. dynamics method was applied to a select group of compds. in order to test the accuracy of this type of computation within a series of closely related compds.

L8 ANSWER 67 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:324172 CAPLUS
DOCUMENT NUMBER: 120:324172
TITLE: Studies of HIV-1 protease inhibitors. II. Incorporation of four types of hydroxyethylene dipeptide isosteres at the scissile site of substrate sequences
AUTHOR(S): Sakurai, Mitsuya; Higashida, Susumu; Sugano, Machiko; Nishi, Takahide; Saito, Fujio; Ohata, Yasuo; Handa, Hiroshi; Komal, Tomoaki; Yagi, Ryuichi; et al.
CORPORATE SOURCE: New Lead Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1993), 41(8), 1378-86
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 120:324172

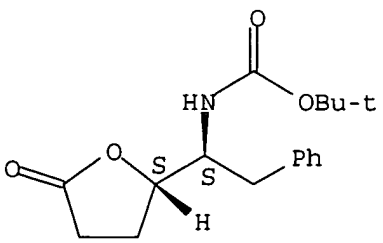
IT **112227-09-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and C-methylation of)
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

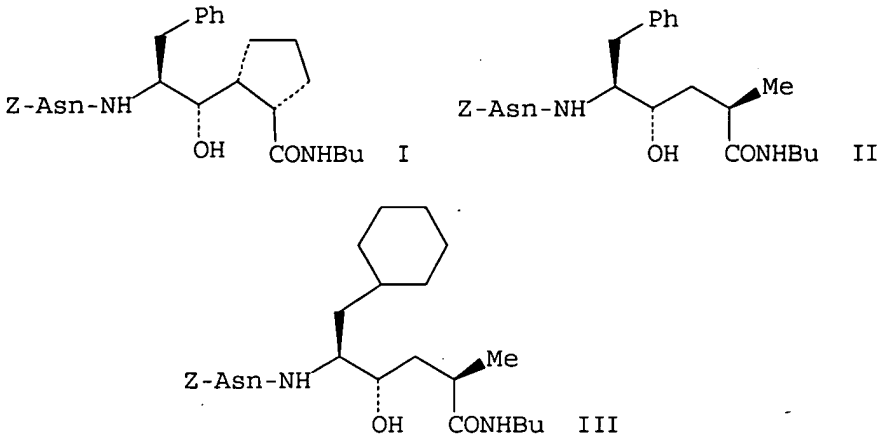


IT **133333-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate in synthesis of HIV-1 protease-inhibiting peptide containing hydroxyethylene dipeptide isostere)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



GI

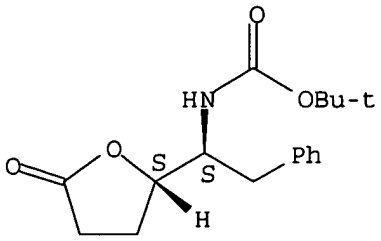


AB Human immunodeficiency virus type 1 (HIV-1) protease inhibitors containing 4 types of hydroxyethylene dipeptide isosteres were designed and synthesized. These inhibitors consist of 8 stereoisomers of phenylalanylproline [Pheψ(H.E.)Pro] (H.E. = hydroxyethylene), 4 stereoisomers of phenylalanylalanine [Pheψ(H.E.)Ala], and 1 stereoisomer each of phenylalanylglycine [Pheψ(H.E.)Gly] and cyclohexylalanylalanine [Chaψ(H.E.)Ala] hydroxyethylene dipeptide isosteres. For the synthesis of the latter 2 isosteres, a new developed synthetic method for γ-lactone was applied. The inhibitory activities of these peptides were evaluated by cleavage assay of partially purified gag proteins or purified synthetic peptide. Of the inhibitors examined, compds I (Z = PhCH2O2C), II, and III were moderately potent inhibitors. The results revealed that the alkyl substituent at C2 is essential, and the stereochem. of the hydroxyethylene dipeptide isosteres greatly affected their inhibitory activities.

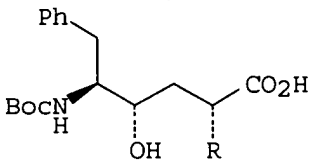
L8 ANSWER 68 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:245739 CAPLUS
DOCUMENT NUMBER: 120:245739
TITLE: Stereoselective synthesis of a hydroxyethylene dipeptide isostere
AUTHOR(S): Diederich, Ann M.; Ryckman, David M.
CORPORATE SOURCE: Synth. Chem. Dep., SmithKline Beecham Pharm., King of Prussia, PA, 19406, USA
SOURCE: Tetrahedron Letters (1993), 34(39), 6169-72
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 120:245739
IT **133333-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate in stereoselective synthesis of hydroxyethylene dipeptide isostere)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

10/687,153R>



GI



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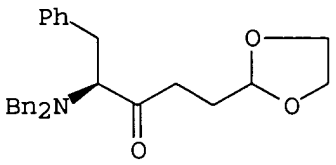


II

AB A stereoselective synthesis of hydroxyethylene dipeptide isosteres I [Boc = Me3CO2C; R = H, Me, benzyl (Bn)] is described. The use of dibenzyl protecting groups on ketoamine II accounts for the selectivity on reduction Also, the dibenzyl group plays a role in directing the introduction of a third chiral center.

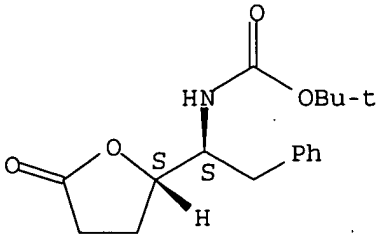
L8 ANSWER 69 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1994:164904 CAPLUS
DOCUMENT NUMBER: 120:164904
TITLE: Preparation of peptide HIV protease inhibitors containing guanidine
INVENTOR(S): Gleason, John Gerald; Lum, Robert Thomas
PATENT ASSIGNEE(S): SmithKline Beecham Corp., USA
SOURCE: PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9309132	A1	19930513	WO 1992-US9402	19921030
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE				
ZA 9208396	A	19930512	ZA 1992-8396	19921030
AU 9230691	A1	19930607	AU 1992-30691	19921030
EP 610431	A1	19940817	EP 1992-924217	19921030
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 07501056	T2	19950202	JP 1992-508659	19921030
PRIORITY APPLN. INFO.:			US 1991-786435	A2 19911101
			WO 1992-US9402	A 19921030

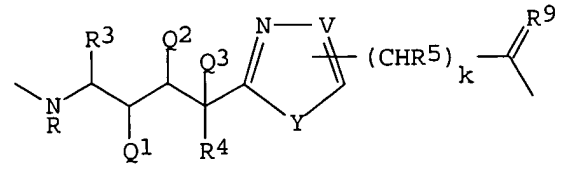
OTHER SOURCE(S): MARPAT 120:164904
IT **133333-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for HIV-1 protease inhibitor)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

10/687,153R>

Absolute stereochemistry. Rotation (-).



GI



AB AD1D2MNRC(:Z)NRR1 [R = H, alkyl, CH2Ph; R1 = R7, R7CO, R7O2C, R7OCHR8CO, ANRCHR5CO; Z = O, NR2; R2 = H, cyano, RCO; D1, D2 = J1CHR5CO, null; J1, J2 = NH, CH2, O; M = NRCHR3CHQ1CHQ2CR4Q3COE, Q1; E = J2CHR6CO; Q1, Q2, Q3 = H, NH2, OH; V = N, C; Y = N, O, S; R3, R4 = H, (substituted) alkyl, alkenyl, cycloalkyl, aryl, heterocyclyl, cycloalkyl, etc.; R5, R6 = (substituted) alkyl, etc.; R7, R8 = H, alkyl, cycloalkyl, etc.; R9 = O, S, H2; A = H, (substituted) aryl, heterocyclyl, etc.; k = 0, 1], were prepared Thus, (2R,4S,5S)-2-phenylmethyl-4-(t-butyldimethylsilyloxy)-5-(t-butoxycarbonyl)amino-6-phenylhexanoylvaline (preparation given) was condensed with carbobenzyloxyguanidine using 1-(3-dimethylaminopropyl)-3-ethylcarbodiimide hydrochloride in CH2Cl2 to give 80% coupling product, which was treated with Bu4NF in THF to give 35% N-benzyloxycarbonyl, N'-[(2R,4S,5S)-2-phenylmethyl-4-hydroxy-5-(t-butoxycarbonyl)amino-6-phenylhexanoyl-5-valyl]guanidine. Title compds. inhibit HIV-1 with Ki = 0.1-2.5 μM.

L8 ANSWER 75 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:650508 CAPLUS
DOCUMENT NUMBER: 119:250508
TITLE: Preparation of 5-amino-4-hydroxyhexanoic acid derivative containing peptides as HIV protease inhibitors
INVENTOR(S): Lang, Marc; Bold, Guido; Faessler, Alexander; Schneider, Peter; Van Hoogesvest, Peter
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.
SOURCE: Eur. Pat. Appl., 79 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 532466	A2	19930317	EP 1992-810678	19920903
EP 532466	A3	19930616		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE														
JP 05230095			A2	19930907	JP 1992-238424								19920907	
CA 2077948			AA	19930313	CA 1992-2077948								19920910	
AU 9222889			A1	19930318	AU 1992-22889								19920910	
AU 661018			B2	19950713										
IL 103126			A1	19970930	IL 1992-103126								19920910	
NO 9203533			A	19930315	NO 1992-3533								19920911	
HU 63632			A2	19930928	HU 1992-2925								19920911	
ZA 9206938			A	19940311	ZA 1992-6938								19920911	
PL 169969			B1	19960930	PL 1992-295905								19920911	
RU 2067585			C1	19961010	RU 1992-5052915								19920911	
CN 1089269			A	19940713	CN 1993-100044								19930104	
PRIORITY APPLN. INFO.:					CH 1991-2689							A	19910912	
					CH 1992-980							A	19920327	
					CH 1992-2007							A	19920625	

OTHER SOURCE(S): MARPAT 119:250508

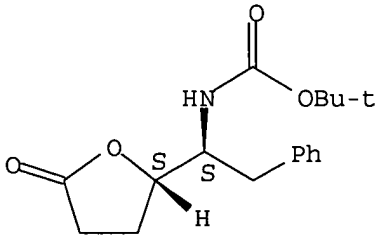
IT **133333-27-4P 150609-68-0P**

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for HIV protease inhibitor)

RN 133333-27-4 CAPLUS

CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

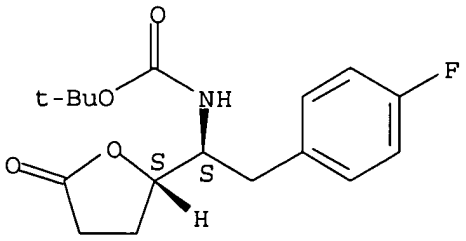
Absolute stereochemistry. Rotation (-).



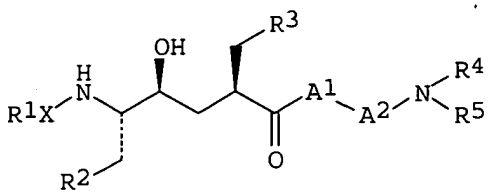
RN 150609-68-0 CAPLUS

CN Carbamic acid, [2-(4-fluorophenyl)-1-(tetrahydro-5-oxo-2-furanyl)ethyl]-, 1,1-dimethylethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI



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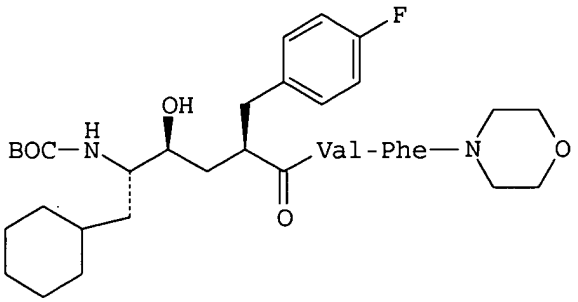


II

AB Title compds. [I; R1 = H, alkoxycarbonyl, heterocyclylcarbonyl, heterocyclyloxycarbonyl, (substituted) benzyloxycarbonyl, etc.; X = bond, α-amino acid residue; R2, R3 = (substituted) Ph, cyclohexyl; A1 = bond, α-amino acid residue; A2 = α-amino acid residue; A1A2 = dipeptide residue whose central amide bond is reduced; NR4R5 = (thio)morpholino], were prepared as HIV protease inhibitors. Thus, title compound II was prepared in many steps starting from BOC-phenylalaninal using solution phase methods. I inhibited HIV-1 multiplication in MT-2 cells with ED90's of 10-5-10-8M. Generic I oral formulations are given.

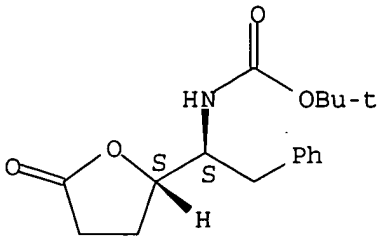
L8 ANSWER 76 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:580400 CAPLUS
DOCUMENT NUMBER: 119:180400
TITLE: HIV protease inhibitors
INVENTOR(S): Dreyer, Geoffrey Bainbridge; Desjarlais, Renee
PATENT ASSIGNEE(S): SmithKline Beckman Corp., USA
SOURCE: PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9302674	A1	19930218	WO 1992-US6373	19920731
W: JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, MC, NL, SE				

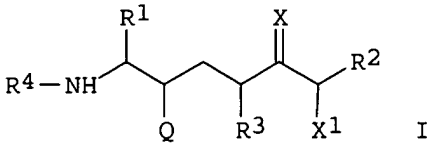
PRIORITY APPLN. INFO.: US 1991-739560 A1 19910802
OTHER SOURCE(S): CASREACT 119:180400; MARPAT 119:180400
IT **133333-27-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(condensation of, with benzyl bromide)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

10/687,153R>



GI



I

AB Compds. I [where R1, R2, R3 = independently H, alkyl, alkenyl, aryl, heteroaryl, etc.; R4 = R5, R5CO, R5OCO, etc.; R5 = H, alkyl, aryl, heteroaryl, etc.; Q = OH, NH2; X1 = H, OH; X = (H, OH) or (:O)] were prepared as inhibitors of HIV-1 protease. For example, Δ3,4-trans-(6R,8S,9S)-10-phenyl-9-tert-butoxycarbonylamino-8-hydroxy-2-methyl-6-phenylmethyl-dec-3-ene-5-one was prepared in 6 steps from (1'S,3R,5S)-5-[(1'-N-tert-butoxycarbonylamino-2'-phenyl)ethyl]-γ-butyrolactone. I inhibit hydrolysis of a peptide substrate by rHIV protease at concns. of 0.5 μM to 2 mM (no addnl. data). I are claimed, as well as pharmaceutical compns., and use for treating retroviral infection, particularly HIV, and also use in conjunction with AZT.

L8 ANSWER 77 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1993:517245 CAPLUS
DOCUMENT NUMBER: 119:117245
TITLE: Preparation of N-imidazolylalkyl-5-amino-4-hydroxyhexanamides and analogs as retroviral protease inhibitors
INVENTOR(S): Carr, Thomas Joseph; DeMarsh, Peter Lawrence; Penwick, Ashley Edward
PATENT ASSIGNEE(S): Smithkline Beecham Corp., USA
SOURCE: PCT Int. Appl., 146 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9302057	A1	19930204	WO 1992-US6047	19920717
W: AT, AU, BB, BG, BR, CA, CH, CS, DE, DK, ES, FI, GB, HU, JP, KR, LU, NL, NO, PL, RO, RU, SE, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE				
AU 9224129	A1	19930223	AU 1992-24129	19920717
CN 1071434	A	19930428	CN 1992-109761	19920717
ZA 9205360	A	19930614	ZA 1992-5360	19920717
EP 602069	A1	19940622	EP 1992-917238	19920717
R: BE, CH, DE, FR, GB, IT, LI, NL				
JP 07500577	T2	19950119	JP 1992-503016	19920717

10/687,153R>

ES 2068739	B1	19951101	ES 1993-107		19930121
ES 2068739	A1	19950416			
PRIORITY APPLN. INFO.:			US 1991-731563	A	19910717
			US 1992-870975	A	19920420
			WO 1992-US6047	A	19920717

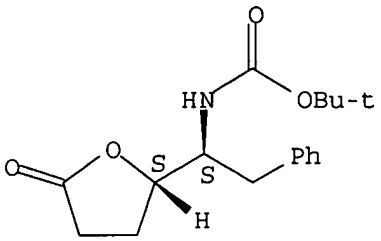
OTHER SOURCE(S): MARPAT 119:117245

IT **133333-27-4**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of retroviral protease inhibitors)

RN 133333-27-4 CAPLUS

CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



AB R5CHR1CH(OH)CHR2CHR3R4 [I; R1, R3 = fluoroalkyl, cycloalk(en)yl(alkyl), aryl(alkyl), heterocyclyl(alkyl), etc.; R2 = H, OH; R4 = azolylamino, N-(azolylalkyl)carbamoyl; R5 = substituted amino] were prepared Thus, Me2CHCHRNH2 (R = imidazol-2-yl) (preparation given) was condensed with (2R, 4S, 5S)-PhCH2CH(NHCO2CMe3)CH(OR6)CH2CH(CH2Ph)COR7 (II; R6 = SiMe2CMe3, R7 = OH) to give, after deprotection, II (R6 = H, R7 = NHCHRCHMe2, R = imidazol-2-yl). I had Ki of 1 nM to 5 μM for inhibition of HIV-1 protease.

L8 ANSWER 91 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER:	1991:656622 CAPLUS
DOCUMENT NUMBER:	115:256622
TITLE:	An efficient synthesis of hydroxyethylene dipeptide isosteres: the core unit of potent HIV-1 protease inhibitors
AUTHOR(S):	Ghosh, Arun K.; McKee, Sean P.; Thompson, Wayne J.
CORPORATE SOURCE:	Dep. Med. Chem., Merck Sharp and Dohme Res. Lab., West Point, PA, 19486, USA
SOURCE:	Journal of Organic Chemistry (1991), 56(23), 6500-3 CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE:	Journal
LANGUAGE:	English
OTHER SOURCE(S):	CASREACT 115:256622

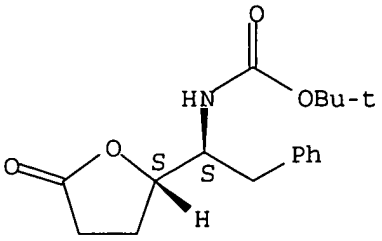
IT **133333-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation, deprotonation, and alkylation of, stereochem. of)

RN 133333-27-4 CAPLUS

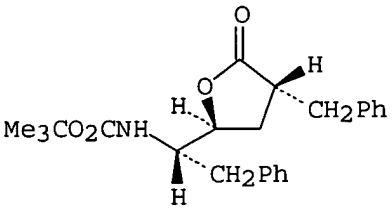
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).

10/687,153R>



GI

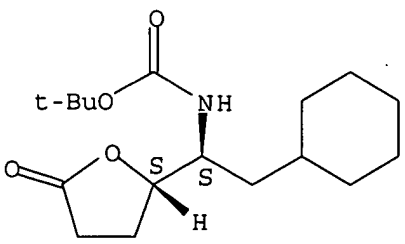


I

AB An efficient and stereocontrolled synthesis of hydroxyethylene dipeptide isosteres via lactone I from com. available, optically pure D-mannose is described. This synthesis represents a practical and enantioselective entry to a range of other dipeptide isosteres which are not limited to amino acid-derived substituents.

L8 ANSWER 92 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:656598 CAPLUS
DOCUMENT NUMBER: 115:256598
TITLE: A new enantioselective synthesis of (4S,5S)-5-(butoxycarbonylamino)-6-cyclohexyl-4-hydroxyhexanoic acid lactone, a hydroxyethylene dipeptide isostere precursor
AUTHOR(S): Kotsuki, Hiyoshizo; Miyazaki, Aya; Ochi, Masamitsu
CORPORATE SOURCE: Fac. Sci., Kochi Univ., Kochi, 780, Japan
SOURCE: Tetrahedron Letters (1991), 32(35), 4503-4
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:256598
IT **112227-09-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as precursor for hydroxyethylene dipeptide isostere)
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



10/687,153R>

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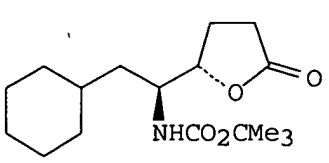

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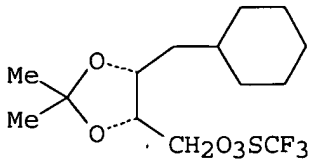
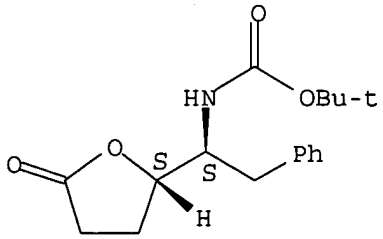


II

AB A new enantioselective synthesis of the title lactone I, a valuable hydroxyethylene dipeptide isostere precursor, have been developed by using coupling reaction of chiral triflate II to LiCH2CO2CMe3 as a key step.

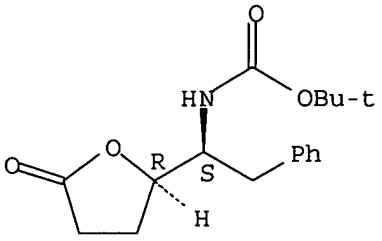
L8 ANSWER 93 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:472197 CAPLUS
DOCUMENT NUMBER: 115:72197
TITLE: Stereocontrolled addition of propionate homoenolate equivalents to chiral α-amino aldehydes
AUTHOR(S): DeCamp, Ann E.; Kawaguchi, Alan T.; Volante, R. P.; Shinkai, Ichiro
CORPORATE SOURCE: Dep. Process Res., Merck Sharp and Dohme Res. Lab., Rahway, NJ, 07065-0900, USA
SOURCE: Tetrahedron Letters (1991), 32(16), 1867-70
CODEN: TELEAY; ISSN: 0040-4039
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:72197
IT **133333-27-4P 135130-98-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



RN 135130-98-2 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2R)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



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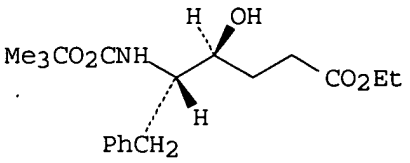

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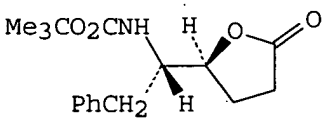


II

AB A highly efficient route is presented for preparation of the medicinally important hydroxyester and lactone intermediates I and II from chiral α-amino aldehydes via homoenolate methodol. Several reaction variables were found to influence the ratio of chelation controlled vs. Felkin-Ahn products.

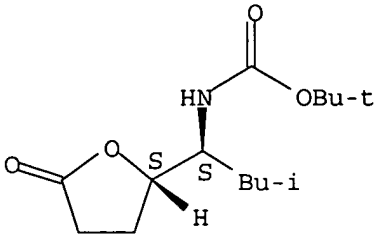
L8 ANSWER 94 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:206574 CAPLUS
DOCUMENT NUMBER: 114:206574
TITLE: Stereoselective preparation of 5-amino-4-hydroxyvaleric acid derivatives
INVENTOR(S): Noyori, Ryoji; Kitamura, Masahito; Ookuma, Takeshi; Morisawa, Yasuhiro; Nishi, Takehide
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03002151	A2	19910108	JP 1989-205663	19890810
PRIORITY APPLN. INFO.:			JP 1988-199722 A1	19880810

OTHER SOURCE(S): CASREACT 114:206574; MARPAT 114:206574
IT **105018-81-3P 112227-09-5P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for renin inhibitors)
RN 105018-81-3 CAPLUS
CN Carbamic acid, [(1S)-3-methyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]butyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

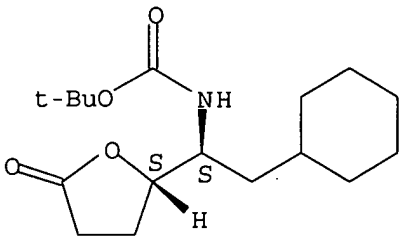
Absolute stereochemistry.

10/687,153R>



RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



AB R1R2NCHR3CH(OH)CH2CR4R5 [R1 = H, lower alkyl, amino-protective group, acyl residue of (un)protected amino acids; R2 = H, lower alkyl; R3 = (un)protected carboxy, (un)protected carbamoyl, mono or di(lower alkyl)carbamoyl, lower alkyl which may be substituted with (un)protected amino, mono or di(lower alkyl)amino, (un)substituted Ph, naphthyl, C3-8 cycloalkyl; R4 = H, C3-8 cycloalkyl, lower alkyl which may be substituted with (un)protected hydroxy, (un)protected amino, mono or di(lower alkyl)amino, (un)substituted Ph, C3-8 cycloalkyl; R5 = (un)protected carboxy, (un)protected thiocarboxy, (un)protected carbamoyl, mono or di(lower alkylcarbamoyl], useful as intermediates for acidic protease (e.g. renin) inhibitors, are stereoselectively prepared by reduction of R1R2NCHR3COCH2CHR4R5 or their salts in the presence of transition metal asym. hydrogenation catalysts. A mixture of (4RS,5S)-Me3COCONHCH(CH2CHMe2)CH(OH)CH2CH2CO2Et, PCC, and mol. sieves 3A in CH2Cl2 was stirred at room temperature overnight to give 81% (5S)-Me3COCONHCH(CH2CHMe2)COCH2CH2CO2Et. This in EtOH was freeze-deaerated tree times, after addition of RuBr2[(R)-binap], the mixture was freeze-deaerated further three times, then the solution was autoclaved under 100 atm H at 100° for 168 h. The resulting product in toluene containing AcOH was refluxed for 2 h to give 81.5% (4S,5S)-5-(tert-butoxycarbonyl)amino-7-methyl-γ-octanolactone and 12.5% its (4R,5S)-isomer.

L8 ANSWER 95 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:185481 CAPLUS
DOCUMENT NUMBER: 114:185481
TITLE: 5-(3-Diazo-2-oxopropyl)-1,3-oxazolidine derivatives as intermediates for renin inhibiting peptides
INVENTOR(S): Ishihara, Sadao; Saito, Fujio; Nishi, Takehide; Kobayashi, Takeo
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 9 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese

10/687,153R>

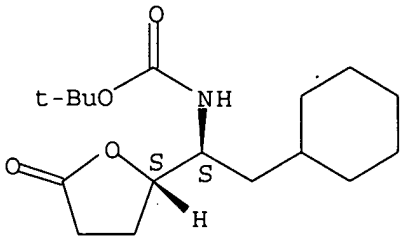
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 02258772	A2	19901019	JP 1989-81097	19890331
JP 2628909	B2	19970709		

PRIORITY APPLN. INFO.: JP 1989-81097 19890331
OTHER SOURCE(S): MARPAT 114:185481

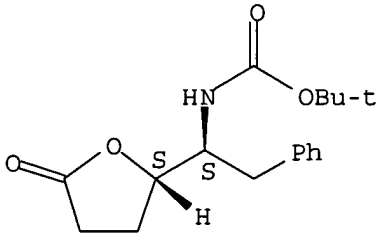
IT **112227-09-5P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and methylation of)
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IT **133333-27-4P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of, as intermediate for renin-inhibiting peptides)
RN 133333-27-4 CAPLUS
CN Carbamic acid, [(1S)-2-phenyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry. Rotation (-).



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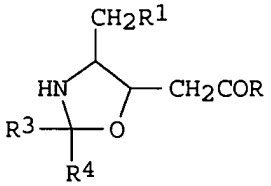


I

AB The title derivs. I (R = CR5N2; R1 = C1-4 alkyl, C3-7 cycloalkyl, Ph which

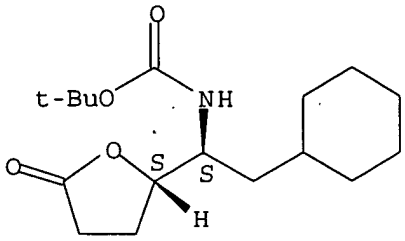
may be substituted with C1-4 alkyl, C1-4 alkoxy, halo; R2 = amino-protective group; R3, R5 = H, C1-4 alkyl; R4 = C1-4 alkyl) (II), useful as intermediates for homostatine derivs. essential for synthesis of renin-inhibiting peptides, are prepared A MeOH solution of 3.45 g (4S,5S)-I (R = OMe, R1 = cyclohexyl, R2 = CO2CMe3, R3 = R4 = Me) was treated with an aqueous NaOH solution under stirring at room temperature for 4 h 20 min to give 3.18 g (4S,5S)-I (R = OH) (III). A THF solution of 605 mg III was treated with N-methylmorpholine and ClCO2CH2CHMe2 at -20° for 20 min, then filtered, the filtrate was treated with an ether solution of CH2N2 at -20° for 30 min then at room temperature overnight to give 230 mg (4S,5S)-II (R1 = cyclohexyl, R2 = CO2CMe3, R3 = R4 = Me, R5 = H). This was converted in 4 steps to (2R,4S,5S)-5-(N-tert-butoxycarbonyl)amino-6-cyclohexyl-4-hydroxy-2-methylhexanoic acid methylamide.

L8 ANSWER 96 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1991:102852 CAPLUS
DOCUMENT NUMBER: 114:102852
TITLE: Preparation of peptide renin inhibitors
INVENTOR(S): Morisawa, Yasuhiro; Kataoka, Mitsuru; Yabe, Yuichiro; Koike, Hiroyuki; Takahagi, Hidekuni; Iijima, Yasuteru; Kokubu, Tatsuo; Hiwada, Kunio
PATENT ASSIGNEE(S): Sankyo Co., Ltd., Japan
SOURCE: Eur. Pat. Appl., 72 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
EP 383635	A2	19900822	EP 1990-301735		19900216
EP 383635	A3	19911227			
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL					
JP 03095168	A2	19910419	JP 1990-32748		19900214
JP 2965599	B2	19991018			
CA 2010260	AA	19900816	CA 1990-2010260		19900216
ES 2077021	T3	19951116	ES 1990-301735		19900216
US 5378689	A	19950103	US 1993-98746		19930728
PRIORITY APPLN. INFO.:			JP 1989-37097	A	19890216
			JP 1989-149577	A	19890614
			US 1990-480060	B1	19900214
			US 1992-979442	B1	19921120

OTHER SOURCE(S): MARPAT 114:102852
IT **112227-09-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of peptide renin inhibitor)
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

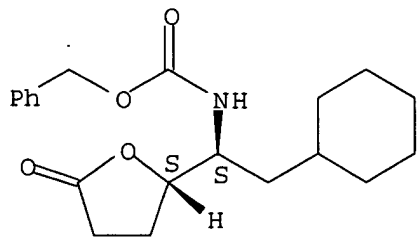
Absolute stereochemistry.



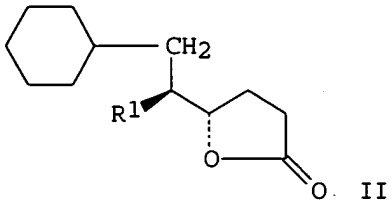
AB R1COCH2CH(CH2R2)CONHCH(CH2R3)CONHCH(CH2R4)CH(OH)CH2CHR5CONHR6 [I; R1 = (substituted) heterocyclyl, amino; R2 = (substituted) Ph, naphthyl; R3 = thiazolyl; R4 = cyclohexyl, Me2CH; R5, R6 = alkyl], were prepared Thus, (2S, 4S, 5S)-2-(tert-butoxycarbonyl)amino-6-cyclohexyl-4-hydroxy-2-isopropyl-N-methylhexanamide [preparation from (5S)-5-[(1S)-1-(tert-butoxycarbonyl)amino-2-cyclohexylethyl]dihydrofuran-2-(3H)-one given] was deprotected with 4N HCl in dioxane and the product was coupled with N-(tert-butoxycarbonyl)-3-(4-thiazolyl)-L-alanine using di-Et cyanophosphonate/Et3N. The product was deprotected as before followed by coupling with (2R)-2-benzyl-3-(morpholinocarbonyl)propionic acid as before to give (2S, 4S, 5S)-5-[N-[2(R)-benzyl-3-(morpholinocarbonyl)propionyl]-3-(4-thiazolyl)-L-alanyl]amino-6-cyclohexyl-4-hydroxy-2-isopropyl-N-methylhexanamide. The latter at 10-7M gave 95.2% inhibition of human renin.

L8 ANSWER 100 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1990:99158 CAPLUS
DOCUMENT NUMBER: 112:99158
TITLE: Synthesis of statine and its analogs
AUTHOR(S): Yanagisawa, Hiroaki; Kanazaki, Takuro; Nishi, Takahide
CORPORATE SOURCE: Chem. Res. Lab., Sankyo Co., Ltd., Tokyo, 140, Japan
SOURCE: Chemistry Letters (1989), (4), 687-90
CODEN: CMLTAG; ISSN: 0366-7022
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 112:99158
IT **122854-72-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 122854-72-2 CAPLUS
CN Carbamic acid, [2-cyclohexyl-1-(tetrahydro-5-oxo-2-furanyl)ethyl]-, phenylmethyl ester, [S-(R*,R*)]- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



GI



II

AB Statine, (3S,4S)-RCH2CH(NH2)CH(OH)CH2CO2H (I, R = Me2CH), and its analogs I (R = cyclopentyl, cyclohexyl, cycloheptyl, PhCH2, PhCH2CH2) and II (R1 = N3, phthalimido, PhCH2O2CNH) were prepared from 5,6-anhydro-3-deoxy-1,2-O-isopropylidene-D-glucofuranose (III). The key step is the stereospecific reaction of the epoxy sugar III with Grignard reagents.

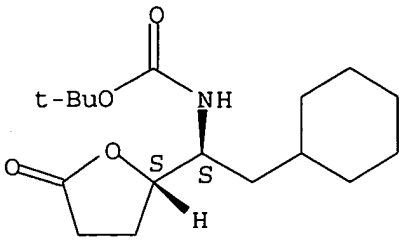
L8 ANSWER 106 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1989:407793 CAPLUS
DOCUMENT NUMBER: 111:7793
TITLE: Preparation of cyclostatine- and homocyclostatine-containing peptides as antihypertensive agents
INVENTOR(S): Hoover, Dennis Jay; Rosati, Robert Louis
PATENT ASSIGNEE(S): Pfizer Inc., USA
SOURCE: Eur. Pat. Appl., 23 pp.
CODEN: EPXXDW
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 297816	A2	19890104	EP 1988-305847	19880624
EP 297816	A3	19900905		
EP 297816	B1	19940302		
R: AT, BE, CH, DE, ES, FR, GB, GR, IT, LI, LU, NL, SE				
US 4859654	A	19890822	US 1988-200820	19880601
AT 102214	E	19940315	AT 1988-305847	19880624
ES 2061652	T3	19941216	ES 1988-305847	19880624
CA 1321676	A1	19930824	CA 1988-570669	19880629
FI 8803135	A	19890102	FI 1988-3135	19880630
DK 8803622	A	19890224	DK 1988-3622	19880630
JP 01026596	A2	19890127	JP 1988-164852	19880701
JP 06031313	B4	19940427		

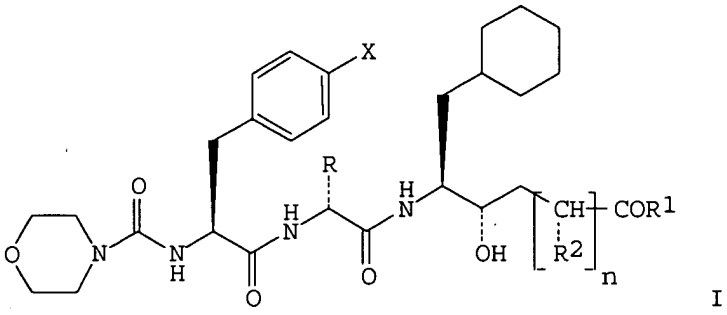
PRIORITY APPLN. INFO.: US 1987-68992 A 19870701
EP 1988-305847 A 19880624
OTHER SOURCE(S): CASREACT 111:7793; MARPAT 111:7793
IT **112227-09-5**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, in preparation of renin inhibitor)
RN 112227-09-5 CAPLUS
CN Carbamic acid, [(1S)-2-cyclohexyl-1-[(2S)-tetrahydro-5-oxo-2-furanyl]ethyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Absolute stereochemistry.

10/687,153R>



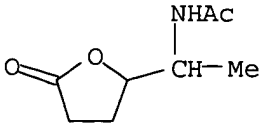
GI



I

AB The title compds. [I; R = C1-6 alkyl, imidazolylmethyl, methylthiomethyl; R1 = amino, alkoxy, alkoxycarbonylpyrrolidinyl, C3-4 alkyl; R2 = CH2CHCl:CH2, (CH2)4NH2, CH2C.tplbond.CH, CH2CH:CHCl, etc.; X = H, OMe, OH; n = 0, 1], useful as antihypertensives (no data), were prepared I (R = imidazol-4-ylmethyl, R1 = NHMe, R2 = CH2CHMe2, X = H, n = 1) was prepared by the solution phase method in 7 steps.

L8 ANSWER 110 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1962:449579 CAPLUS
DOCUMENT NUMBER: 57:49579
ORIGINAL REFERENCE NO.: 57:9943a-c
TITLE: The structure of primocarcin
AUTHOR(S): Isono, Kiyoshi
CORPORATE SOURCE: Inst. Phys. & Chem. Research., Tokyo
SOURCE: J. Antibiotics (Japan) (1961), 14(Ser. A), 160
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
IT **90088-07-6**, Hexanoic acid, 5-acetamido-4-hydroxy-, γ-lactone (preparation of)
RN 90088-07-6 CAPLUS
CN Hexanoic acid, 5-acetamido-4-hydroxy-, γ-lactone (7CI) (CA INDEX NAME)

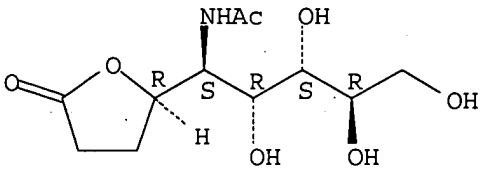


AB cf. CA 56, 13328h. The infrared absorption spectrum of primocarcin (I), C8H12N2O3, showed the presence of α,β-unsatd. carbonyl or acid

amide and terminal methylene groups. I was hydrogenated to dihydroprimocarcin (II), C8H14N2O3, m. 137-41°, over Pd-C and to tetrahydroprimocarcin (III), C8H16N2O3, m. 183°, over PtO2. I with Ac2O in pyridine yielded mono-Ac derivative, C10H18N2O4, m. 132-3°. II lost the maximum at 253 mμ. Infrared absorption spectra of II and III showed reduction of the methylene group of I terminal to carbonyl group and reduction of both terminal methylene and carbonyl groups of II. Mild hydrolysis of III with alkali yielded CO2 and a neutral compound (IV), C8H13NO3, m. 76°. IV formed Fe hydroxamate and the infrared spectrum of IV showed the formation of γ-lactone and the presence of secondary amide. Exhaustive alkali hydrolysis of III gave 1 mole NH3 and 1 mole AcOH. III hydrolyzed in 3N HCl yielded NH4Cl and δ-amino-γ-hydroxycaproic acid (V) (m. 185°), identified by oxidation with periodate and subsequent oxidation with Ag2O. V was also obtained by alkaline hydrolysis. I was proposed as 4-acetamido-4-penten-3-one-1-carboxamide.

L8 ANSWER 111 OF 111 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1959:121406 CAPLUS
DOCUMENT NUMBER: 53:121406
ORIGINAL REFERENCE NO.: 53:21655e-i
TITLE: Degradation of lactaminic acid to succinic acid
AUTHOR(S): Kuhn, Richard; Brossmer, Reinhard
CORPORATE SOURCE: Max-Planck-Inst. Med. Forschung, Heidelberg, Germany
SOURCE: Ann. (1959), 624, 137-41
DOCUMENT TYPE: Journal
LANGUAGE: Unavailable
IT **108846-36-2**, D-glycero-D-talo-Nononic acid, 5-acetamido-2,3,5-trideoxy-, γ-lactone
(preparation of)
RN 108846-36-2 CAPLUS
CN D-glycero-D-talo-Nononic acid, 5-acetamido-2,3,5-trideoxy-, γ-lactone (6CI) (CA INDEX NAME)

Absolute stereochemistry.



GI For diagram(s), see printed CA Issue.
AB Lactaminic acid (N-acetylneuraminic acid) (I) (3 g.) noncryst., but chromatographically homogeneous, was dissolved in 25 cc. HCl, stirred 24 hrs. (protected from moisture) with 40 cc. EtSH at 0°, then diluted with 100 cc. H2O, treated slowly with basic PbCO3 to pH 4-5, filtered and washed with 1 l. hot H2O and the mixed solns. evaporated in vacuo, digested with 30 cc. EtOH at 4°, filtered and evaporated at 20° to yield up to 3.46 g. diethylmercaptal of 5-acetamino-3,5-dideoxy-D-glycero-D-talo-2-oxononoic acid-γ-lactone (II), long prisms, m. 124-5° (decomposition) (H2O); dried at 50°/0.01 mm. over P2O5, [α]23D -83° (c 1, MeOH), showed an infrared (I.R.) lactone band at 5.67 μ. Solubilities of II were given. II was neutral in H2O, did not reduce Fehling solution, gave neither the Bial nor the Ehrlich test, formed no humin substances with hot 2N HCl, and gave a neg. ninhydrin reaction. I in 0.1N MeOH-KOH (c 0.52) gave [α]22D -69° (2 min.) → 9.5° (12 hrs., end value). I, on a paperchromatogram, Rf 0.93 gave red color with KIO3 and benzidine acetate (thus differing from N-acetyl-D-glucosamine diethylmercaptal). II, in aqueous Me2CO with HgCl2 or

10/687,153R>

CdCO3 at 20°, and treated with H2S gave I. II in 5 cc. 70% EtOH at 20° with alkali-free freshly prepared Raney Ni, kept 38 hrs. and warmed to 70°, the mixture filtered, washed with 70% EtOH, passed through Amberlite IR 120 (H+), and evaporated gave 0.98 g. 5-acetamino-2,3,5-trideoxy-D-glycero-D-talononoic acid γ-lactone (III), rectangles, m. 148-9° (absolute EtOH; then H2O-EtOH-Et2O; then absolute EtOH), [α]23D -35° (c 0.7, MeOH) which in 0.1N methanolic KOH gradually changed from [α]21D -21° (5 min.) → -13° (33 min. to 6 hrs.) → -18° (17 hrs., end value). Solubilities of III were given. III was neutral, did not reduce Fehling solution, gave neither the Ehrlich not Bial tests, and showed a typical I.R. lactone band. III (0.4 g.) heated 5 hrs. at 120° with 3 cc. HNO3 (d. 1.4) and repeatedly evaporated with H2O gave 60 mg. (CH2CO2H)2 (IV), contaminated with little (CO2H)2; IV was purified by conversion into CH2CO2.O.CO2.CH2 m. 117-18°, and identified by the I.R. spectrum.

=> log y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	549.69	877.93

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	-81.03	-81.03

STN INTERNATIONAL LOGOFF AT 19:01:32 ON 01 MAR 2005